# Annex B City of Colfax

# **B.1** Introduction

This Annex details the hazard mitigation planning elements specific to the City of Colfax, a previously participating jurisdiction to the 2016 Placer County Local Hazard Mitigation Plan (LHMP) Update. This Annex is not intended to be a standalone document, but appends to and supplements the information contained in the Base Plan document. As such, all sections of the Base Plan, including the planning process and other procedural requirements apply to and were met by the City. This Annex provides additional information specific to Colfax, with a focus on providing additional details on the risk assessment and mitigation strategy for this community.

# **B.2** Planning Process

As described above, Colfax followed the planning process detailed in Chapter 3 of the Base Plan. In addition to providing representation on the Placer County Hazard Mitigation Planning Committee (HMPC), the City formulated their own internal planning team to support the broader planning process requirements. Internal planning participants, their positions, and how they participated in the planning process are shown in Table B-1. Additional details on Plan participation and City representatives are included in Appendix A. FILL OUT TABLE ON WHO PARTICIPATED. TELL HOW THEY PARTICIPATED (ATTENDED MEETINGS, REVIEWED ANNEX, PROVIDED PAST OCCURRENCE INFO, FILLED OUT CAPABILITY TABLES, PROVIDED MITIGATION ACTIONS, ETC).

Table B-1 City of Colfax - Planning Team

Name	Position/Title	How Participated

Coordination with other community planning efforts is paramount to the successful implementation of this LHMP Update. This section provides information on how the City integrated the previously approved 2016 Plan into existing planning mechanisms and programs. Specifically, the City incorporated into or implemented the 2016 LHMP through other plans and programs shown in Table B-2. FILL OUT TABLE IF THE CITY DID NOT INCORPORATE INTO ANY EXISTING PLANNING MECHANISMS, PLEASE EXPLAIN.



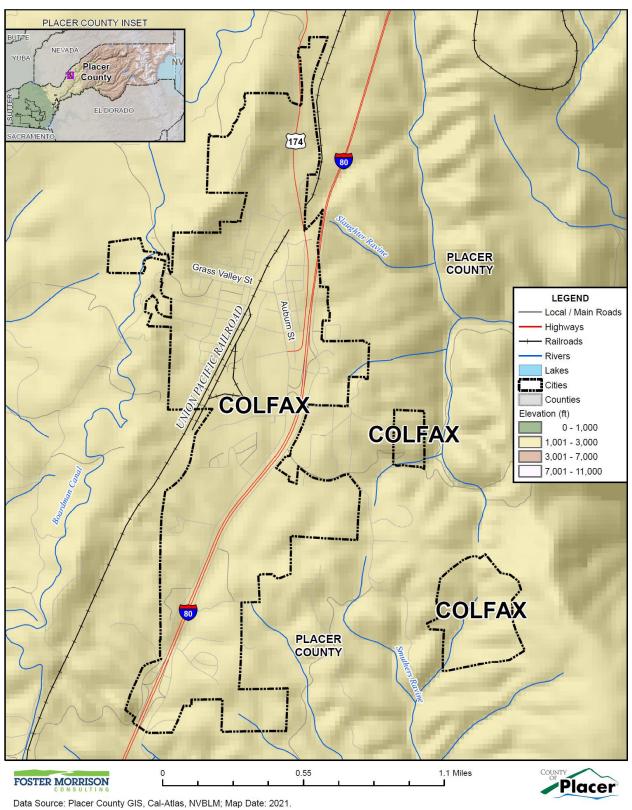
Table B-2 2016 LHMP Incorporation

Planning Mechanism 2016 LHMP Was Incorporated/Implemented In.	Details: How was it incorporated?			

# **B.3** Community Profile

The community profile for the City of Colfax is detailed in the following sections. Figure B-1 displays a City map and the location of Colfax within Placer County.

Figure B-1 City of Colfax



# B.3.1. Geography and Climate

The City of Colfax is the northern-most incorporated city in Placer County, located in the Sierra Nevada Foothills at a general elevation of 2,400 feet above msl. The City covers an area of 1.3 square miles and straddles I-80. Colfax sits a few miles outside the Tahoe National Forest as I-80 begins its climb into the Sierras. The City of Colfax sits at approximately 2,425 feet above mean sea level.

Colfax average temperatures range from the low 80°F to low 90°F during the summer to the mid 30°F to low 40°F during the winter. Colfax receives an average of 45.59 inches of rain and 18.9 inches of snow annually.

# B.3.2. History

Colfax was originally inhabited by the Maidu Indians. In 1849 during the frenetic days of the Gold Rush, southeast of present-day Colfax, Illinoistown (previously known as Alder Grove) rose as a major supply hub for the Sierra Foothill mining camps. In 1865, destiny doomed the thriving community when transcontinental railroad engineers bypassed it. Railroad construction Camp 20 became the town site of choice. Camp 20 was later renamed Colfax in honor of Schuyler Colfax, who visited the town in 1865 when he was Speaker of the House, assuring the construction crew that the government was committed to completing the transcontinental railroad. The town went on to become a major switching and maintenance station for the Central Pacific and Southern Pacific, and in 1876 a terminus for the Nevada County Narrow Gauge Railroad, serving the fruit orchards of the area and Nevada County gold mines. Colfax was incorporated as a city in 1910.

# B.3.3. Economy

Colfax is the home several major employers: GKM Corporation, Winner Chevrolet, Placer Union High School District, Hills Flat Lumber, Sierra Energy, Crispin Cider, and Sierra Market. TRUE? ANYTHING TO ADD? US Census estimates show economic characteristics for the City of Colfax. These are shown in Table B-3 and Table B-4. Mean household income in the City was \$57,734. Median household income in the City was \$70,575.

Table B-3 City of Colfax – Civilian Employed Population 16 years and Over

Industry	Estimated Employment	Percent
Agriculture, forestry, fishing and hunting, and mining	20	2.1%
Construction	99	2.1%
Manufacturing	69	10.2%
Wholesale trade	57	7.1%
Retail trade	177	5.9%
Transportation and warehousing, and utilities	56	18.3%
Information	8	5.8%
Finance and insurance, and real estate and rental and leasing	91	0.8%

Industry	Estimated Employment	Percent
Professional, scientific, and management, and administrative and waste management services	70	9.4%
Educational services, and health care and social assistance	150	7.2%
Arts, entertainment, and recreation, and accommodation and food services	66	15.5%
Other services, except public administration	38	6.8%
Public administration	77	3.9%

Source: US Census Bureau American Community Survey 2013-2017 Estimates

Table B-4 City of Colfax - Income and Benefits

Income Brac	ket Percent
<\$10,000	5.8%
\$10,000 - \$14,999	13.6%
\$15,000 - \$24,9999	9.4%
\$25,000 - \$34,999	5.0%
\$35,000 – \$49,999	9.5%
\$50,000 - \$74,999	21.2%
\$75,000 – \$99,999	13.9%
\$100,000 - \$149,999	14.7%
\$150,000 - \$199,999	1.4%
\$200,000 or more	5.5%

Source: US Census Bureau American Community Survey 2013-2017 Estimates

# B.3.4. Population

The California Department of Finance estimated the January 1, 2020 total population for the City of Colfax was 2,152.

# **B.4** Hazard Identification

Colfax's identified the hazards that affect the City and summarized their location, extent, likelihood of future occurrence, potential magnitude, and significance specific to Colfax (see Table B-5). DUE TO WILDFIRE IN THE CITY, EXTREME HEAT WAS CHANGED TO A MEDIUM SIGNIFICANCE HAZARD. TREE MORTALITY WAS ADDED TO HAZARDS LIST AFTER THE TABLE WAS SENT TO YOU. VERIFY OR CHANGE ANYTHING BELOW. IF ANYTHING GOES CHANGES IN THE SIGNFICANCE COLUMN, LET US KNOW AS IT WILL CHANGE THE VULNERABILITY ASSESSMENT BELOW.

Table B-5 City of Colfax—Hazard Identification Assessment

Hazard	Geographic Extent	Likelihood of Future Occurrences	Magnitude/ Severity	Significance	Climate Change Influence
Agricultural Hazards	Limited	Unlikely	Negligible	Low	Medium
Avalanche	Limited	Unlikely	Negligible	Low	Medium
Climate Change	Extensive	Likely	Limited	Medium	_
Dam Failure	Limited	Unlikely	Negligible	Medium	Medium
Drought & Water Shortage	Significant	Likely	Critical	Medium	High
Earthquake	Significant	Occasional	Critical	Medium	Low
Floods: 1%/0.2% annual chance	Limited	Unlikely	Negligible	Low	Medium
Floods: Localized Stormwater	Significant	Occasional	Limited	Medium	Medium
Landslides, Mudslides, and Debris Flows	Limited	Occasional	Limited	Medium	Medium
Levee Failure	Limited	Unlikely	Negligible	Low	Medium
Pandemic	Extensive	Likely	Critical	Medium	Medium
Seiche	Limited	Unlikely	Negligible	Low	Medium
Severe Weather: Extreme Heat	Significant	Likely	Limited	Medium	High
Severe Weather: Freeze and Snow	Significant	Likely	Limited	Low	Medium
Severe Weather: Heavy Rains and Storms	Significant	Limited	Limited	Low	Medium
Severe Weather: High Winds and Tornadoes	Significant	Likely	Critical	Medium	Low
Tree Mortality	Significant	Likely	Catastrophic	High	High
Wildfire	Significant	Likely	Catastrophic	High	High
Geographic Extent Limited: Less than 10% of planning area		Severity  —More than 50 per facilities for more t			

Significant: 10-50% of planning area Extensive: 50-100% of planning area

#### Likelihood of Future Occurrences

Highly Likely: Near 100% chance of occurrence in next year, or happens

Likely: Between 10 and 100% chance of occurrence in next year, or has a recurrence interval of 10 years or less. Occasional: Between 1 and 10% chance of occurrence in the next year, or has a recurrence interval of 11 to 100 years.

Unlikely: Less than 1% chance of occurrence in next 100 years, or has a recurrence interval of greater than every 100 years.

shutdown of facilities for more than 30 days; and/or multiple deaths. Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability.

Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability.

Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid.

#### Significance

Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact

#### Climate Change Influence

Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact

# **B.5** Hazard Profile and Vulnerability Assessment

The intent of this section is to profile Colfax's hazards and assess the City's vulnerability separate from that of the Placer County Planning Area as a whole, which has already been assessed in Section 4.3 Hazard Profiles and Vulnerability Assessment in the Base Plan. The hazard profiles in the Base Plan discuss overall impacts to the Placer County Planning Area and describes the hazard problem description, hazard location and extent, magnitude/severity, previous occurrences of hazard events and the likelihood of future occurrences. Hazard profile information specific to the City is included in this Annex. This vulnerability assessment analyzes the property, population, critical facilities, and other assets at risk to hazards ranked of medium or high significance specific to the City (as identified in the Significance column of Table B-5) and also includes a vulnerability assessment to the three primary hazards to the State of California: earthquake, flood, and wildfire. For more information about how hazards affect the County as a whole, see Chapter 4 Risk Assessment in the Base Plan.

## **B.5.1.** Hazard Profiles

Each hazard vulnerability assessment in Section B.5.3, includes a hazard profile/problem description as to how each medium or high significant hazard affects the City and includes information on past hazard occurrences and the likelihood of future hazard occurrence. The intent of this section is to provide jurisdictional specific information on hazards and further describes how the hazards and risks differ across the Placer County Planning Area.

# B.5.2. Vulnerability Assessment and Assets at Risk

This section identifies Colfax's total assets at risk, including values at risk, populations at risk, critical facilities and infrastructure, natural resources, and historic and cultural resources. Growth and development trends are also presented for the community. This data is not hazard specific, but is representative of total assets at risk within the community.

#### Values at Risk

The following data from the Placer County Assessor's Office is based on the 2020 Assessor's data. The methodology used to derive property values is the same as in Section 4.3.1 of the Base Plan. This data should only be used as a guideline to overall values in the County, as the information has some limitations. The most significant limitations are created by Proposition 13 and the Williamson Act as detailed in the Base Plan. With respect to Proposition 13, instead of adjusting property values annually, the values are not adjusted or assessed at fair market value until a property transfer occurs. As a result, overall value information is most likely low and does not reflect current market value of properties within the County. It is also important to note, in the event of a disaster, it is generally the value of the infrastructure or improvements to the land that is of concern or at risk. Generally, the land itself is not a loss. However, depending on the type of hazard and impact of any given hazard event, land values may be adversely affected; thus, land values are included as appropriate. Table B-6 shows the 2020 Assessor's values and content replacement values (e.g., the values at risk) broken down by property type for the City.

Table B-6 City of Colfax – Total Values at Risk by Property Use

Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Agricultural	0	0	\$0	\$0	\$0	\$0
Commercial	118	70	\$12,126,301	\$21,608,886	\$21,608,886	\$55,344,073
Industrial	33	20	\$9,487,797	\$15,276,833	\$22,915,248	\$47,679,878
Institutional	13	9	\$1,039,080	\$5,047,655	\$5,047,655	\$11,134,390
Miscellaneous	166	3	\$2,860,671	\$20,892	\$20,892	\$2,902,455
Natural / Open Space	16	0	\$0	\$0	\$0	\$0
Residential	642	609	\$39,484,118	\$110,214,317	\$55,107,156	\$204,805,591
Colfax Total	988	711	\$64,997,967	\$152,168,583	\$104,699,837	\$321,866,387

Source: Placer County 2020 Parcel/Assessor's Data

## Critical Facilities and Infrastructure

Critical facilities and infrastructure are those buildings and infrastructure that are crucial to a community. Should these be damaged, it makes it more difficult for the community to respond to and recover from a disaster. For purposes of this plan, a critical facility is defined as:

Any facility, including without limitation, a structure, infrastructure, property, equipment or service, that if adversely affected during a hazard event may result in severe consequences to public health and safety or interrupt essential services and operations for the community at any time before, during and after the hazard event.

This definition was refined by separating out three classes of critical facilities as further described in Section 4.3.1 of the base plan. An inventory of critical facilities in the City of Colfax from Placer County GIS is shown on Figure B-2 and detailed in Table B-7. Details of critical facility definition, type, name, address, and jurisdiction by hazard zone are listed in Appendix F.

PLACER COUNTY INSET YUBA Placer County EL DORADO SACRAMENT PLACER COUNTY Grass Valley St LEGEND Local / Main Roads Highways Railroads Rivers Lakes Cities COLFAX Counties Elevation (ft) COLFAX 0 - 1,000 1,001 - 3,000 3,001 - 7,000 7,001 - 11,000 PLACER COUNTY CRITICAL FACILITY
CATEGORY Class 1 Class 2 Class 3 0.55 1.1 Miles FOSTER MORRISON Placer Data Source: Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Figure B-2 City of Colfax – Critical Facilities

Table B-7 City of Colfax – Critical Facilities

Critical Facility Class	Critical Facility Type	Facility Count
Class 2	Fire Station	2
	Police Station	1
Class 3	Hall	1
	Water Treatment Plant	1
Colfax Total		5

Source: Placer County GIS

#### Natural Resources

Natural resources are unique to each area and are difficult to replace. Should a natural disaster occur, these species and locations are at risk. The City of Colfax has a variety of habitat types that include urban, annual grasslands, seasonal wetlands, riparian zones, and oak savannah woodlands. These environments support plant and wildlife that include protected and special status species listed in the Table B-8.

Table B-8 Threatened Species in the City of Colfax Planning Area

Common name	Scientific Name	Federal Status*	State Status
Birds			
Fringed myotis	Myotis thysanodes	SC	_
Long-eared myotis	Myotis evotis	SC	_
Long-legged myotis	Myotis volans	SC	_
Small-footed myotis	Myotis ciliolabrum	SC	_
Spotted bat	Euderma macalatum	SC	SSC
Yuma myotis bat	Myotis yumanensis	SC	SSC
Black swift	Cypseloides niger	SC, MNBMC	SSC
Vaux's swift	Chaetura vauxi	_	SSC
Prairie falcon	Falco mexicanus	MNBNC	SSC
Lawrence's golfinch	Carduells lawrencei	SC, MNBMC	_
Bank swallow	Riparia	_	Т
Tricolored blackbird	Agelalus tricolor	SC, MNBMC	SSC
Loggerhead shrike	Lanius ludovicianus	SC, MNBMC	SSC
Bald eagle	Haliaeetus leucocephalus	Т	Е
Northern goshawk	Accipeter gentilis	SC	SSC
Insects			
Valley elderberry longhorn beetle	Desmocerus californicus dimorphus	Т	_
Shirttail Creek stonefly	Megaleuctra sierra	SC	_
Sagehen Creek goracean caddisfly	Goracea oregano	SC	_
Spiny rhyacophilan caddisfly	Rhyacophila spinata	SC	_

Common name	Scientific Name	Federal Status*	State Status			
Amphibians						
Foothill yellow legged frog	Rana boylii	SC	SSC			
California red-legged frog	Rana aurora dratonii	Т	SSC			
Northwestern pond turtle	Clemmys marmorat marmorata	SC	SSC			
California horned lizard	Phrynosoma coronatum frontale	SC	SSC			
*Status explanations	*Status explanations					
Federal E – listed as endangered under the federal T – listed as threatened under the federal MNBMC – Fish and Wildlife Service: M Management Concern SC = species of concern, formerly Categ – = no listing status	Endangered Species Act Eigratory Nongame Birds of	State E = listed as endang California Endangero T = listed as threater California Endangero SSC = species of s	ed Species Act ned under the ed Species Act			

Source: City of Colfax Wastewater Treatment Plant Improvements Project Environmental Impact Report (2004)

#### Historic and Cultural Resources

Historic and cultural resources are difficult to replace. Should a natural disaster occur, these properties and locations can be at risk.

The City of Colfax has a stock of historically significant homes, public buildings, and landmarks. To inventory these resources, the HMPC collected information from a number of sources. The California Department of Parks and Recreation Office of Historic Preservation (OHP) was the primary source of information. OHP administers the National Register of Historic Places, the California Register of Historical Resources, California Historical Landmarks, and the California Points of Historical Interest programs. Each program has different eligibility criteria and procedural requirements. These requirements are detailed in Section 4.3.1 of the Base Plan. Table B-9 lists the historical buildings in the City.

Table B-9 City of Colfax – Historical Resources

Resource Name (Plaque Number)	National Register	State Landmark	Point of Interest	Date Listed	City
Colfax Freight Depot (N2076)	X			12/17/1999	Colfax
Colfax Passenger Depot (N2044)	X			1/15/1999	Colfax
First Transcontinental Railroad-Colfax (780)		X		11/20/1962	Colfax
Stevens Trail (N2181)	X			11/20/2002	Colfax

Source: California Department of Parks and Recreation Office of Historic Preservation, http://ohp.parks.ca.gov/ retrieved on 12/6/2020

In addition to the registered sites, there are several assets within Colfax that define the community and represent the City's history. Some of the historical sites of importance to Colfax are listed below.

- Neff House at 55 West Grass Valley St.
- The Colfax Hotel at Grass Valley St. and Railroad St.
- Chamber of Commerce Rail Car

- > Perkins-Lobner Victorian on Railroad St.
- Colfax Fruit Sheds
- Lincoln Highway and Highway 40 routes went through the City
- Schuyler Colfax statue at Grass Valley St. and Railroad St.
- Northwestern Pacific Caboose, Number 28 at Main St. and Grass Valley St.
- Fire Bell Tower at the north end of the Colfax Freight Depot
- Hydraulic Monitor at the foot of the flagpole on North Main St.
- > Judge Jacob Kuenzly home at Depot St. and Pleasant St.
- Masonic Building and IOOF Building on North Main St.
- Colfax Record Newspaper building at 25 W. Church St.
- Colfax City Hall at 33 South Main St.
- Colfax Theater at 49 South Main St.
- ➤ Building currently housing the Colfax Branch Library at South Main St. and Church St.
- All of the other buildings along the west side of North and South Main St.
- Colfax Cemetery on North Canyon Way
- > Cape Horn railroad roadbed

It should be noted that these lists may not be complete, as they may not include those currently in the nomination process and not yet listed. Additionally, as defined by the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), any property over 50 years of age is considered a historic resource and is potentially eligible for the National Register. Thus, in the event that the property is to be altered, or has been altered, as the result of a major federal action, the property must be evaluated under the guidelines set forth by CEQA and NEPA. Structural mitigation projects are considered alterations for the purpose of this regulation.

# Growth and Development Trends

As part of the planning process, the HMPC looked at changes in growth and development, both past and future, and examined these changes in the context of hazard-prone areas, and how the changes in growth and development affect loss estimates and vulnerability over time. Information from the City of Colfax General Plan Housing Element, the California Department of Finance, the US Census Bureau form the basis of this discussion.

# Historic Population Trends and Current Population

Population growth can increase the number of people living in hazard prone areas. Colfax has generally seen growth that has been mostly steady, with population losses occurring in the late 1960s. Colfax has seen growth rates as shown in Table B-10.

Table B-10 City of Colfax – Population Changes Since 1950

Year	Population	Change	% Change
1950	820	_	_
1960	915	95	59.2%
1970	798	-117	-12.8%
1980	981	183	22.9%
1990	1,306	333	33.1%

Year	Population	Change	% Change	
2000	1,597	291	14.5%	
20101	1,963	364	22.9%	
20202	2,152	189	9.6%	

Source: <sup>1</sup>US Census Bureau, <sup>2</sup>California Department of Finance

### Special Populations and Disadvantaged Communities

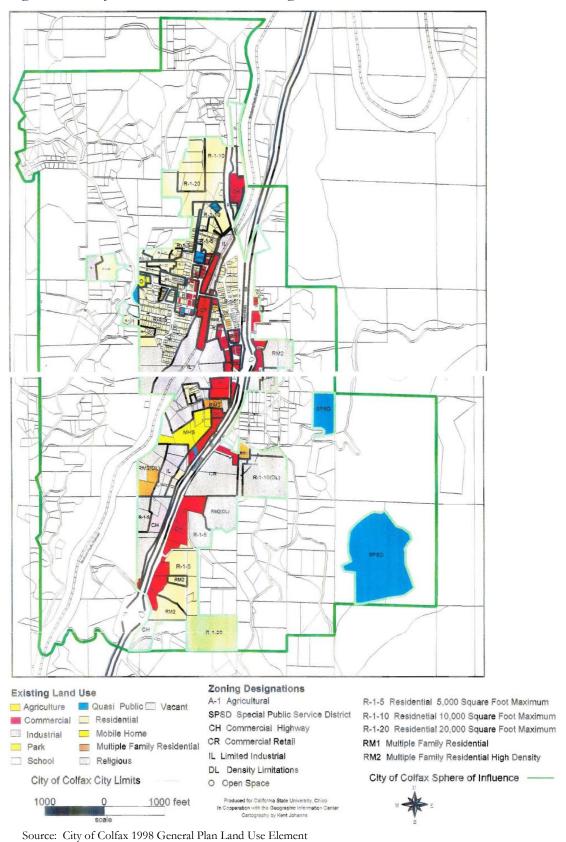
WHAT SPECIAL POPULATIONS EXIST IN THE CITY? ELDERLY? LOW INCOME? NON-ENGLISH SPEAKING? HANDICAPPED? WHERE ARE THEY LOCATED? ANYTHING UNIQUE TO ADD REGARDING THESE POPULATIONS AND POTENTIAL HAZARD IMPACTS?

#### Land Use

State planning law requires that the land use element of a general plan include a statement of the standard population density, building intensity, and allowed uses for the various land use designations in the plan (Government Code Section 65302(a)). The City's land use designations are generally described below and mapped on the Land Use Diagram (Figure B-3). The Colfax Municipal Code provides detailed land use and development standards for development.

With this General Plan, a variety of new land use designations have been established to reflect the more mixed and, in some cases, more intense land uses envisioned for Colfax. New mixed-use designations provide the opportunity for a combination of residential, commercial, and office uses on a single site, depending on the designation. Future land use for the City of Colfax from the City of Colfax General Plan Land Use Element is shown on Figure B-3.

Figure B-3 City of Colfax – Land Use Diagram



#### Development since 2016 Plan

As discussed in Section 4.3.1 of the Base Plan, future development has occurred in the City since the last plan. Some of this has occurred in hazard prone areas. The City Building Department tracked total building permits issued since 2016 for the City. These are tracked by total development, property use type, and hazard risk area. These are shown in Table B-11 and Table B-12.

Table B-11 City of Colfax – Total Development Since 2016

Property Use	2016	2017	2018	2019	2020
Agricultural					
Commercial					
Industrial					
Residential					
Unknown					
Total					

Source: City of Colfax Building Department

Table B-12 City of Colfax – Development in Hazard Areas since 2016

Property Use	1% Annual Chance Flood	Levee Protected Area	Wildfire Risk Area <sup>1</sup>	Other
Agricultural				
Commercial				
Industrial				
Residential				
Unknown				
Total				

Source: City of Colfax Building Department

Moderate or higher wildfire risk area

#### **Future Development**

New development in Colfax continues to be slow. While there are a few areas for new development, the majority of the undeveloped land in the City is very sloped and therefore challenging to build. ANYTHING TO ADD OR CHANGE HERE OR BELOW?

The Sacramento Council on Governments (SACOG) modeled population projections for the City of Colfax and other areas of the region in 2012 for a Metropolitan Transportation Plan/Sustainable Communities Strategy report. This forecast uses a 2008 base year estimate with projections to 2020 and 2035 for population, housing units, households and employment. SACOG estimated the City population in 2020 and 2035 to be 1,788 and 1,976 respectively. SACOG DOES NOT DO GROWTH PROJECTIONS THAT ARE CURRENTLY AVAILABLE. DOES THE CITY HAVE MORE CURRENT GROWTH PROJECTIONS?

In the City's 2013-20121 Housing Element, maps of vacant residential and industrial lands were created. These are areas where future development could occur in the City. These are shown in Figure B-4 and Figure B-5.

COLFAX CITY LIMITS Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRGAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013 VACANT RESIDENTIAL 1,500 3,000 4,500 FOR ILLUSTRATION PURPOSES ONLY **NOVEMBER 2013** 

Figure B-4 City of Colfax – Residential Vacant Land Inventory Map

Source: 2013-2021 City of Colfax Housing Element

Colfax CalleDi VACANT INDUSTRIAL Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013 COLFAX CITY LIMITS 1,500 3,000 4,500 FOR ILLUSTRATION PURPOSES ONLY **NOVEMBER 2013** Source: 2013-2021 City of Colfax Housing Element

Figure B-5 City of Colfax – Industrial Vacant Land Inventory Map

More general information on growth and development in Placer County as a whole can be found in "Growth and Development Trends" in Section 4.3.1 Placer County Vulnerability and Assets at Risk of the Base Plan.

#### **GIS** Analysis

## **PLACE**

# B.5.3. Vulnerability to Specific Hazards

This section provides the vulnerability assessment, including any quantifiable loss estimates, for those hazards identified above in Table B-5 as high or medium significance hazards. Impacts of past events and vulnerability of the City to specific hazards are further discussed below (see Section 4.1 Hazard Identification in the Base Plan for more detailed information about these hazards and their impacts on the Placer County Planning Area). Methodologies for evaluating vulnerabilities and calculating loss estimates are the same as those described in Section 4.3 of the Base Plan.

An estimate of the vulnerability of the City to each identified priority hazard, in addition to the estimate of likelihood of future occurrence, is provided in each of the hazard-specific sections that follow. Vulnerability is measured in general, qualitative terms and is a summary of the potential impact based on past occurrences, spatial extent, and damage and casualty potential. It is categorized into the following classifications:

- **Extremely Low**—The occurrence and potential cost of damage to life and property is very minimal to nonexistent.
- **Low**—Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal.
- ➤ **Medium**—Moderate potential impact. This ranking carries a moderate threat level to the general population and/or built environment. Here the potential damage is more isolated and less costly than a more widespread disaster.
- ➤ **High**—Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past.
- **Extremely High**—Very widespread with catastrophic impact.

Depending on the hazard and availability of data for analysis, this hazard specific vulnerability assessment also includes information on values at risk, populations at risk, critical facilities and infrastructure, and future development.

#### Dam Failure

**Likelihood of Future Occurrence**—Unlikely **Vulnerability**—Medium

THIS HAZARD WAS RATED AS A MEDIUM SIGNIFICANCE HAZARD. WE DON'T SEE THAT THE CITY IS IN ANY MAPPED DAM FAILURE AREAS. THE GENERAL PLAN SAFETY ELEMENT NOTED NO DAMS (STATED DAM FAILURE IN THE CITY WAS IN A "LESS-THAN-SIGNIFICANT IMPACT). ANY HAZARD OF SIGNIFICANCE (RATED AS A MEDIUM OR HIGH

SIGNIFICANCE IN Table B-5) IS REQUIRED BY FEMA TO HAVE AN ACCOMPANYING MITIGATION ACTION. IF YOU HAVE A MITIGATION ACTION IN MIND, WE CAN KEEP THIS AS A SIGNIFICANT HAZARD! WE JUST NEED TO KNOW WHAT DAMS YOU ARE CONCERNED WITH.

## Hazard Profile and Problem Description

Dams are manmade structures built for a variety of uses including flood protection, power generation, agriculture, water supply, and recreation. When dams are constructed for flood protection, they are usually engineered to withstand a flood with a computed risk of occurrence. For example, a dam may be designed to contain a flood at a location on a stream that has a certain probability of occurring in any one year. If prolonged periods of rainfall and flooding occur that exceed the design requirements, that structure may be overtopped or fail. Overtopping is the primary cause of earthen dam failure in the United States.

#### Location and Extent

Dam failure is a natural disaster from two perspectives. First, the inundation from released waters resulting from dam failure is related to naturally occurring floodwaters. Second, a total dam failure would most probably happen as a consequence of the natural disaster triggering the event, such as an earthquake. There is no scale with which to measure dam failure. However, Cal DWR Division of Safety of Dams (DOSD) assigns hazard ratings to dams within the State that provides information on the potential impact should a dam fail. The following two factors are considered when assigning hazard ratings: existing land use and land use controls (zoning) downstream of the dam. Dams are classified in four categories that identify the potential hazard to life and property: Low, Significant, High, and Extremely High. These were discussed in more detail in Section 4.2.10 of the Base Plan.

While a dam may fill slowly with runoff from winter storms, a dam break has a very quick speed of onset. The duration of dam failure is generally not long – only as long as it takes to empty the reservoir of water the dam held back. The City would be affected for as long as the flood waters from the dam failure took to drain downstream.

Geographic flood extent from the Cal OES dam inundation areas is shown in **Error! Reference source not found.** Note, the Cal OES and DSOD dam inundation data did not include inundation mapping of all dams of concern to the Placer County Planning Area and the City; thus, the below analysis reflects information based on available data. Other dams may be identified as a concern to the City. Based on available data, the City falls outside mapped dam hazard inundation areas.

The City also noted that, while inundation data was not available, the following dams are also a concern to the City: PROVIDE A LIST OF OTHER (NONMAPPED) DAMS OF CONCERN TO THE CITY?

#### **Past Occurrences**

There has been no state or federal disaster declarations for dam failure in the County. The City noted no other dam failure occurrences that have affected the City. TRUE?

#### Vulnerability to Dam Failure

Dam failure flooding would vary by community depending on which dam fails and the nature and extent of the dam failure and associated flooding. NEED SPECIFIC VULNERABILITY OF THE CITY. WHAT DAMS ARE YOU WORRIED ABOUT? HOW WOULD THEY AFFECT THE CITY?

#### **Impacts**

Impacts to the City from a dam failure flood include loss of life and injury, flooding and damage to property and structures, damage to critical facilities and infrastructure, loss of natural resources, and all other flood related impacts. Additionally, mass evacuations and associated economic losses can also be significant.

#### **Future Development**

Future dam failures are considered unlikely. However, given the high number of affected parcels, future development in the City could be affected by dam failures and associated flooding. The City enforces it floodplain ordinance, which helps to reduce risk to flooding by requiring structures in the 1% annual chance floodplains to be above the base flood elevation, which depending on inundation depths and affected areas may provide some relief. Siting of future development areas should take dam failure flooding into account. **ANYTHING TO ADD?** 

# Drought & Water Shortage

**Likelihood of Future Occurrence**—Likely **Vulnerability**—Medium

#### Hazard Profile and Problem Description

Drought is a complex issue involving many factors—it occurs when a normal amount of precipitation and snow is not available to satisfy an area's usual water-consuming activities. Drought can often be defined regionally based on its effects. Drought is different than many of the other natural hazards in that it is not a distinct event and usually has a slow onset. Drought can severely impact a region both physically and economically. Drought affects different sectors in different ways and with varying intensities. Adequate water is the most critical issue and is critical for agriculture, manufacturing, tourism, recreation, and commercial and domestic use. As the population in the area continues to grow, so will the demand for water.

#### Location and Extent

Drought and water shortage are regional phenomenon. The whole of the County, as well as the whole of the City, is at risk. The US Drought Monitor categorizes drought conditions with the following scale:

- None
- ➤ D0 Abnormally dry
- ➤ D1 Moderate Drought
- ➤ D2 Severe Drought
- ➤ D3 Extreme drought

#### ➤ D4 – Exceptional drought

Drought has a slow speed of onset and a variable duration. Drought can last for a short period of time, which does not usually affect water shortages and for longer periods. Should a drought last for a long period of time, water shortage becomes a larger issue. Current drought conditions in the City and the County are shown in Section 4.2.11 of the Base Plan.

#### **Past Occurrences**

There have been two state and one federal disaster declaration from drought. This can be seen in Table B-13.

Table B-13 Placer County – State and Federal Drought Disaster Declarations 1950-2020

Disaster Type		State Declarations	Federal Declarations		
	Count	int Years		Years	
Drought	1	2014	1	1977	

Source: Cal OES, FEMA

Since drought is a regional phenomenon, past occurrences of drought for the City are the same as those for the County and includes 4 multi-year droughts since 1950. Details on past drought occurrences can be found in Section 4.2.11 of the Base Plan.

HOW WAS THE CITY AFFECTED BY THE MOST RECENT DROUGHT OCCURRING FROM 2014-2016? IF NO PAST OCCURRENCES, SIMPLY STATE THAT.

#### Vulnerability to and Impacts from Drought and Water Shortage

Based on historical information, the occurrence of drought in California, including the City, is cyclical, driven by weather patterns. Drought has occurred in the past and will occur in the future. Periods of actual drought with adverse impacts can vary in duration, and the period between droughts can be extended. Although an area may be under an extended dry period, determining when it becomes a drought is based on impacts to individual water users.

The vulnerability of the City to drought is City-wide, but impacts may vary and include reduction in water supply and an increase in dry fuels. The potential for a reduction in water supply during drought conditions generally leads to both mandated and voluntary conservation measures during extended droughts. During these times, the costs of water can also increase. The increased dry fuels and fuel loads associated with drought conditions can also result in an increased fire danger. In areas of extremely dry fuels, the intensity and speed of fires can be significant. Water supply and flows for fire suppression can also be an issue during extended droughts.

Other qualitative impacts associated with drought in the planning area are those related to water intensive activities such as, municipal usage, commerce, tourism, recreation and agricultural use. Drought conditions can also cause soil to compact and not absorb water well, potentially making an area more susceptible to flooding.

With more precipitation likely falling as rain instead of snow in the Sierra's, and warmer temperatures causing decreased snowfall to melt faster and earlier, water supply is likely to become more unreliable. In addition, drought and water shortage is predicted to become more common. This means less water available for use over the long run, and additional challenges for water supply reliability, especially during periods of extended drought.

The impact of a drought on the City of Colfax is primarily one of water supply; however, the impact to natural resources in the area is also a concern. In addition, drought conditions contribute to increased wildfire risk. Domestic water for the City of Colfax is provided by the Placer County Water Agency. The source of water for the City of Colfax is the South Fork of the Yuba River and the Bear River. The water is conveyed from Lake Spaulding via the PG&E Drum Canal, into the Agency's Boardman Canal, and then in a pipe to the Colfax Water Treatment Plant. Near the City's ballpark, the Agency has an additional 1.0 million gallon reservoir.

A multiple year drought can severely compromise the water supply within the district and adversely impact natural resources. Most recently, after 2 years of below-average rainfall and very low snow-melt run off, Governor Brown, in 2014, declared a state of emergency for drought conditions statewide. The final California Department of Water Resources showed snowpack water content at only 5 percent of normal. With the unknowns of drought and globally changing climate conditions, the City continues to promote water conservation throughout the community.

#### **Future Development**

As the population in the area continues to grow, so will the demand for water. Ongoing planning will be needed by the City and water agencies to account for population growth and increased future water demands.

# Earthquake

**Likelihood of Future Occurrence**—Occasional **Vulnerability**—Medium

#### Hazard Profile and Problem Description

An earthquake is caused by a sudden slip on a fault. Stresses in the earth's outer layer push the sides of the fault together. Stress builds up, and the rocks slip suddenly, releasing energy in waves that travel through the earth's crust and cause the shaking that is felt during an earthquake. Earthquakes can cause structural damage, injury, and loss of life, as well as damage to infrastructure networks, such as water, power, gas, communication, and transportation. Earthquakes may also cause collateral emergencies including dam and levee failures, seiches, hazmat incidents, fires, avalanches, and landslides. The degree of damage depends on many interrelated factors. Among these are: the magnitude, focal depth, distance from the causative fault, source mechanism, duration of shaking, high rock accelerations, type of surface deposits or bedrock, degree of consolidation of surface deposits, presence of high groundwater, topography, and the design, type, and quality of building construction.

#### Location and Extent

Since earthquakes are regional events, the whole of the City is at risk to earthquake. Colfax and the surrounding area are at lower risk from significant seismic and geologic hazards. The Colfax General Plan Safety Element notes that the State's listing of active faults does not include any showing surface rupture in the City of Colfax, but relatively little fault mapping has been completed in the region. A study for the City of Colfax notes that "potentially active" faults in the area include the Bear Mountain and the Melones Faults, which are in the vicinity of Colfax, and are located about three to four miles to the west and east of Colfax, respectively. Earthquakes on these faults would have the greatest potential for damaging buildings in Colfax, especially the unreinforced masonry structures in the older part of the City.

The amount of energy released during an earthquake is usually expressed as a magnitude and is measured directly from the earthquake as recorded on seismographs. An earthquake's magnitude is expressed in whole numbers and decimals (e.g., 6.8). Seismologists have developed several magnitude scales, as discussed in Section 4.2.12 of the Base Plan.

Another measure of earthquake severity is intensity. Intensity is an expression of the amount of shaking at any given location on the ground surface. Seismic shaking is typically the greatest cause of losses to structures during earthquakes. The City is located in an area where few earthquakes of significant magnitude occur, so both magnitude and intensity of earthquakes are expected to remain low. Seismic shaking maps for the area show Placer County and the City fall within a low to moderate shake risk.

#### **Past Occurrences**

Colfax may experience ground shaking from distant major to great earthquakes on faults to the west and east. For example, to the west, both the San Andreas fault (source of the 8.0 estimated Richter magnitude San Francisco earthquake that damaged Sacramento in 1906) and the closer Hayward fault have the potential for experiencing major to great events. To the east in Nevada, the several faults associated with the series of earthquakes in 1954, especially the major (7.1 Richter magnitude) December 16, 1954 Fairview Peak event (about 100 miles east of Carson City) could cause minor ground shaking in Colfax.

The City noted no past occurrences of earthquakes or that affected the City in any meaningful way. TRUE? WAS THE CITY AFFECTED BY THE 1975 OROVILLE EARTHQUAKE OR THE 2014 NAPA EARTHQUAKE?

#### Vulnerability to and Impacts from Earthquake

The combination of plate tectonics and associated California coastal mountain range building geology generates earthquake as a result of the periodic release of tectonic stresses. Placer County's mountainous terrain lies in the center of the North American and Pacific tectonic plate activity. There have been earthquakes as a result of this activity in the historic past, and there will continue to be earthquakes in the future of the California north coastal mountain region.

Fault ruptures itself contributes very little to damage unless the structure or system element crosses the active fault; however, liquefaction can occur further from the source of the earthquake. In general, newer construction is more earthquake resistant than older construction due to enforcement of improved building

codes. Manufactured housing is very susceptible to damage because their foundation systems are rarely braced for earthquake motions. Locally generated earthquake motions and associated liquefaction, even from very moderate events, tend to be more damaging to smaller buildings, especially those constructed of unreinforced masonry (URM) and soft story buildings. There are unreinforced masonry buildings in the older part of the City.

The Uniform Building Code (UBC) identifies four seismic zones in the United States. The zones are numbered one through four, with Zone 4 representing the highest level of seismic hazard. The UBC establishes more stringent construction standards for areas within Zones 3 and 4. All of California lies within either Zone 3 or Zone 4. The City of Colfax is within the less hazardous Zone 3.

Earthquake vulnerability is primarily based on population and the built environment. Urban areas in high seismic hazard zones are the most vulnerable, while uninhabited areas are less vulnerable.

Impacts from earthquake in the City will vary depending on the fault that the earthquake occurs on, the depth of the earthquake strike, and the intensity of shaking. Large events could cause damages to infrastructure, critical facilities, residential and commercial properties, and possible injuries or loss of life.

## Earthquake Analysis

Due to the regional effects of an earthquake, a Hazus earthquake analysis was performed on a countywide basis. This can be found in Section 4.3.11 of the Base Plan. While these runs were not done specific to the City, maps showing damage in the County show greater areas of damage near the cities in the County. This is because earthquake damages are generally related to the level of development, with more developed areas seeing more damages. The deterministic 7.0 Hayward Fault and 8.3 San Andreas Hazus earthquake runs showed minimal damage to the County and the cities. The probabilistic scenario, which is much less likely in Placer County as it assumes shaking from a fault inside the County, did show damage to the County and the cities.

#### **Future Development**

Although new growth and development corridors would fall in the area affected by earthquake, given the small chance of major earthquake and the building codes in effect, development in the earthquake area will continue to occur. The City enforces the state building code, which mandates construction techniques that minimize seismic hazards. Future development in the City is subject to these building codes. VERIFY AND ADD TO

#### Flood: 1%/0.2% Annual Chance

**Likelihood of Future Occurrence**—Occasional/Unlikely **Vulnerability**—Low

Although ranked as a low significance hazard by the City, due to its significance in the County and in the State of California, the flood hazard assessment for Colfax is included here.

# Hazard Profile and Problem Description

This hazard analyzes the FEMA DFIRM 1% and 0.2% annual chance floods. These tend to be the larger floods that can occur in the County or in the City, and have caused damages in the past. Flooding is a significant problem in Placer County. Flooding generally is not a significant hazard to the City of Colfax, but limited localized stormwater flooding has occurred occasionally during heavy rainfalls and is discussed in the Flood: Localized Stormwater Flooding section below.

#### **Location and Extent**

The City of Colfax is located outside the 1% and 0.2% annual chance flood zones. This is seen in Figure B-6.

FEMA DFIRM LEGEND PLACER COUNTY INSET 1% Annual Chance BUTTE Zone A YUBA Zone AE: Regulatory Floodway Placer **County** Zone AE Zone AO 0.2% Annual Chance EL DORADO Zone X (shaded) X Protected by Levee ACRAMENT Other Areas Zone X (unshaded) PLACER COUNTY Grass Valley St Auburn St LEGEND Local / Main Roads Highways Railroads Rivers COLFAX Lakes COLFAX Cities Counties PLACER COUNTY 0.55 1.1 Miles FOSTER MORRISON Placer Data Source: FEMA DFIRM 11/2/2018, Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Figure B-6 City of Colfax – FEMA DFIRM Flood Zones

Table B-14 details the DFIRM mapped flood zones located within the City. As detailed below, Colfax is outside of any mapped FEMA flood hazard areas.

Table B-14 City of Colfax- DFIRM Flood Hazard Zones

Flood Zone	Description	Flood Zone Present in City of Colfax
A	1% annual chance flooding: No base flood elevations provided	
AE	1% annual chance flooding: Base flood elevations provided	
AE Floodway	1% annual chance flood: Regulatory floodway; Base flood elevations provided	
AO	1% annual chance flooding: sheet flow areas. BFEs derived from detailed hydraulic analyses are shown in this zone.	
Shaded X	0.2% annual chance flooding: The areas between the limits of the 1% annual chance flood and the 0.2-percent-annual-chance (or 500-year) flood	
X Protected by Levee	Areas protected by levees from 1% annual chance flood event. Levee protection places these areas in the 0.2% annual chance flood zone.	
X (unshaded)	No flood hazard	X

Source: FEMA

Flood extents can generally be measured in volume, velocity, and depths of flooding. Expected flood depths in the City vary, depending on the nature and extent of a flood event; specific depths are unknown. Flood durations in the City tend to be short to medium term, or until either the storm drainage system can catch up or flood waters move downstream. Flooding in the City tends to have a shorter speed of onset, due to the amount of water that flows through the City.

Geographical flood extents for the City from the FEMA DFIRMs are shown in Table B-15. Again, this illustrates that the City falls outside FEMA flood hazard areas as all of the City falls within the X-unshaded Zone.

Table B-15 City of Colfax – Geographical DFIRM Flood Zone Extents

Flood Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
1% Annual Chance	0	0.00%	0	0.00%	0	0.00%
0.2% Annual Chance	0	0.00%	0	0.00%	0	0.00%
Other Areas	794	100.0%	347	100.0%	447	100.0%
Total	794	100.0%	347	100.0%	447	100.0%

Source: FEMA DFIRM 11/2/2018

#### **Past Occurrences**

A list of state and federal disaster declarations for Placer County from flooding is shown on Table B-16. These events may have affected the City to some degree.

Table B-16 Placer County – State and Federal Disaster Declarations from Flood 1950-2020

Disaster Type		Federal Declarations	State Declarations		
	Count	nt Years		Years	
Flood (including heavy rains and storms)	16	16 1950, 1955, 1958 (twice), 1962, 1963, 1969, 1973, 1980, 1983, 1986, 1995 (twice), 1997, 2008, 2017		1955, 1958, 1962, 1964, 1969, 1983, 1986, 1995 (twice), 1997, 2006 (twice), 2017	

Source: Cal OES, FEMA

The City noted no other past occurrences of flooding. TRUE?

#### Vulnerability to and Impacts from Flood

During winter months, long periods of precipitation and the timing of that precipitation are critical in determining the threat of flood, and these characteristics further dictate the potential for widespread structural and property damages. Predominantly, the effects of flooding are generally confined to areas near the waterways of the County and the City. As waterways grow in size from local drainages, so grows the threat of flood and dimensions of the threat. This threatens structures in the floodplain. Structures can also be damaged from trees falling as a result of water-saturated soils. Electrical power outages happen, and the interruption of power causes major problems. Loss of power is usually a precursor to closure of governmental offices and community businesses. Public schools may also be required to close or be placed on a delayed start schedule. Roads can be damaged and closed, causing safety and evacuation issues. People may be swept away in floodwaters, causing injuries or deaths.

Floods are among the costliest natural disasters in terms of human hardship and economic loss nationwide. Floods can cause substantial damage to structures, landscapes, and utilities as well as life safety issues. Floods can be extremely dangerous, and even six inches of moving water can knock over a person given a strong current. During a flood, people can also suffer heart attacks or electrocution due to electrical equipment short outs. Floodwaters can transport large objects downstream which can damage or remove stationary structures. Ground saturation can result in instability, collapse, or other damage. Objects can also be buried or destroyed through sediment deposition. Floodwaters can also break utility lines and interrupt services. Standing water can cause damage to crops, roads, foundations, and electrical circuits. Direct impacts, such as drowning, can be limited with adequate warning and public education about what to do during floods. Other problems connected with flooding and stormwater runoff include erosion, sedimentation, degradation of water quality, loss of environmental resources, and economic impacts.

#### Assets at Risk

Based on the vulnerability of Colfax to the flood hazard, the sections that follow describes significant assets at risk in the City of Colfax. This section includes the values at risk, flooded acres, population at risk, and critical facilities at risk.

#### Insurance Coverage, Claims Paid, and Repetitive Losses

The City of Colfax does not have any FEMA floodplains and thus does not participate in the NFIP nor the CRS. As a result they do not track this information. Thus, there are no identified Repetitive Loss properties in the City.

California Department of Water Resources Best Available Maps (BAM)

The FEMA regulatory maps provide just one perspective on flood risks in Placer County. Senate Bill 5 (SB 5), enacted in 2007, authorized the California DWR to develop the Best Available Maps (BAM) displaying 100- and 200-year floodplains for areas located within the Nevada-San Joaquin (SAC-SJ) Valley watershed. This effort was completed by DWR in 2008. DWR has expanded the BAM to cover all counties in the State and to include 500-year floodplains.

Different than the FEMA DFIRMs which have been prepared to support the NFIP and reflect only the 100-year event risk, the BAMs are provided for informational purposes and are intended to reflect current 100-, 200-(as applicable), and 500-year event risks using the best available data. The 100-year floodplain limits on the BAM are a composite of multiple 100-year floodplain mapping sources. It is intended to show all currently identified areas at risk for a 100-year flood event, including FEMA's 100-year floodplains. The BAM are comprised of different engineering studies performed by FEMA, Corps, and DWR for assessment of potential 100-, 200-, and 500-year floodplain areas. These studies are used for different planning and/or regulatory applications, and for each flood frequency may use varied analytical and quality control criteria depending on the study type requirements.

The value in the BAMs is that they provide a bigger picture view of potential flood risk to the City than that provided in the FEMA DFIRMs. The BAM map for Colfax is shown in Figure B-7. This map further illustrates the lack of a significant flood hazard in the City.

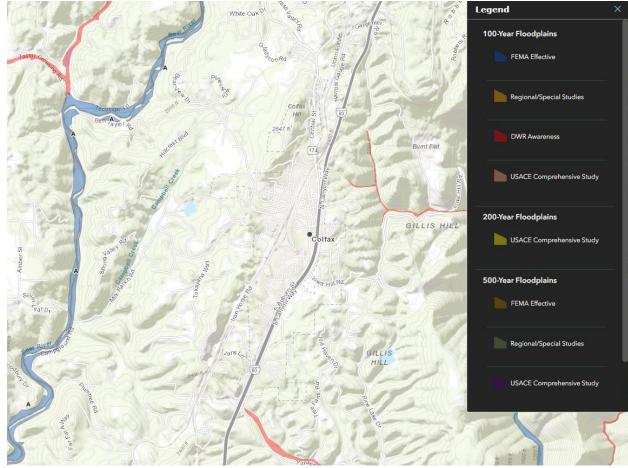


Figure B-7 City of Colfax – Best Available Map

Source: California DWR

Legend explanation: Blue - FEMA 1%, Orange - Local 1% (developed from local agencies), Red - DWR 1%r (Awareness floodplains identify the 1% annual chance flood hazard areas using approximate assessment procedures.), Pink - USACE 1% (2002 Sac and San Joaquin River Basins Comp Study), Yellow - USACE 0.5% (2002 Sac and San Joaquin River Basins Comp Study), Tan - FEMA 0.2%, Grey - Local 0.2% (developed from local agencies), Purple - USACE 0.2% (2002 Sac and San Joaquin River Basins Comp Study).

#### **Future Development**

The City of Colfax does not have any FEMA flood hazard zones and thus future development will all occur outside the FEMA flood zones.

# Flood: Localized Stormwater Flooding

# **Likelihood of Future Occurrence**—Occasional **Vulnerability**—Medium

## Hazard Profile and Problem Description

Flooding occurs in areas other than the FEMA mapped 1% and 0.2% annual chance floodplains. Flooding may be from drainages not studied by FEMA, lack of or inadequate drainage infrastructure, or inadequate

maintenance. Localized, stormwater flooding occurs throughout the County during the rainy season from November through April. Prolonged heavy rainfall contributes to a large volume of runoff resulting in high peak flows of moderate duration.

#### Location and Extent

The City of Colfax is subject to localized flooding throughout the City. Flood extents are usually measured in areas affected, velocity of flooding, and depths of flooding. Expected flood depths in the City vary by location. Flood durations in the City tend to be short to medium term, or until either the storm drainage system can catch up or flood waters move downstream. Localized flooding in the City tends to have a shorter speed of onset, especially when antecedent rainfall has soaked the ground and reduced its capacity to absorb additional moisture.

#### **Past Occurrences**

The City noted that localized flooding occurs each year, but events causing damages could not be recalled. Because of storm drain improvements completed since 2010, damages from localized flooding have been significantly reduced.

## Vulnerability to and Impacts from Localized Flooding

Historically, much of the growth in the City and County has occurred adjacent to streams, resulting in significant damages to property, and losses from disruption of community activities when the streams overflow. Additional development in the watersheds of these streams affects both the frequency and duration of damaging floods through an increase in stormwater runoff.

The City tracks localized flooding areas. Affected localized flood areas identified by the City of Colfax are summarized in Table B-17. FILL OUT TABLE - IF NO AREAS ARE KNOWN TO HAVE LOCALIZED FLOODING, STATE THAT.

Table B-17 City of Colfax - List of Localized Flooding Problem Areas

Area Name	Flooding	Pavement Deterioration	Washout	High Water	Landslide/ Mudslide	Debris	Downed Trees
			-				

Source: City of Colfax

Primary concerns associated with stormwater flooding include impacts to infrastructure that provides a means of ingress and egress throughout the community. Ground saturation can result in instability,

collapse, or other damage to trees, structures, roadways and other critical infrastructure. Objects can also be buried or destroyed through sediment deposition. Floodwaters can break utility lines and interrupt services. Standing water can cause damage to crops, roads, and foundations. Other problems connected with flooding and stormwater runoff include erosion, sedimentation, degradation of water quality, losses of environmental resources, and certain health hazards.

# DOES THE CITY HAVE ANY SPECIFIC VULNERABILITY CONCERNS/IMPACTS ASSOCIATED WITH DROUGHT?

#### **Future Development**

Future development in the City will add more impervious surfaces causing an increase in stormwater runoff and the continued need to drain these waters. The City will need to be proactive to ensure that increased development has proper siting and drainage for stormwaters. The risk of localized flooding to future development can also be minimized by accurate recordkeeping of repetitive localized storm activity. Mitigating the root causes of the localized stormwater flooding will reduce future risks of losses.

#### Landslide, Mudslide, Debris Flows

**Likelihood of Future Occurrence**—Occasional **Vulnerability**—Medium

### Hazard Profile and Problem Description

According to the California Geological Survey (CGS), landslides refer to a wide variety of processes that result in the perceptible downward and outward movement of soil, rock, and vegetation under gravitational influence. Common names for landslide types include slump, rockslide, debris slide, lateral spreading, debris avalanche, earth flow, and soil creep. Landslides may be triggered by both natural and human-induced changes in the environment that result in slope instability.

The susceptibility of an area to landslides depends on many variables including steepness of slope, type of slope material, structure and physical properties of materials, water content, amount of vegetation, and proximity to areas undergoing rapid erosion or changes caused by human activities. These activities include mining, construction, and changes to surface drainage areas. Landslide events can be determined by the composition of materials and the speed of movement. A rockfall is dry and fast while a debris flow is wet and fast. Regardless of the speed of the slide, the materials within the slide, or the amount of water present in the movement, landslides are a serious natural hazard.

Debris flows, can also occur in some areas of the County and the City. These debris flows generally occur in the immediate vicinity of existing drainage swales or steep ravines. Debris flows occur when near surface soil in or near steeply sloping drainage swales becomes saturated during unusually heavy precipitation and begins to flow downslope at a rapid rate. Debris flows are also common during the rainy season in post fire areas.

#### Location and Extent

Landslides, mudslides, and debris flows can affect certain areas of the City. The CGS has estimated that the risk varies across the City and has created maps showing risk variance. This risk variance falls into multiple categories. These are discussed in Section 4.3.14 of the Base Plan. According to the City Planning Team, risk varies within the City range from low to moderate. The speed of onset of landslide is often short, especially in post-wildfire burn scar areas, but it can also take years for a slope to fail. Landslide duration is usually short, though digging out and repairing landslide areas can take some time. WHERE ARE THE LANDSLIDE PROBLEM AREAS WITHIN THE CITY OF COLFAX?

#### **Past Occurrences**

There have been no federal or state disaster declarations in the County from landslide. The City Planning Team noted no past occurrences of landslides. No injuries to people or property damage from landslides have been identified within the City of Colfax. TRUE? HAS THE CITY EXPERIENCED ANY LANDSLIDES? DAMAGES?

## Vulnerability to and Impacts from Landslide

Although landslides are primarily associated with slopes greater than 15 percent, they can also occur in relatively flat areas and as cut-and-fill failures, river bluff failures, lateral spreading landslides, collapse of wine-waste piles, failures associated with quarries, and open-pit mines. Landslides may be triggered by both natural- and human-caused activity. Impacts from landslides include damage to property and critical facilities, possible injuries or deaths, and impacts to transportation routes that provide ingress and egress for the City.

The City 1998 General Plan Safety Element identifies local geologic hazards, which include a moderate to very high erosion hazard; the potential for soil liquefaction in or near stream beds or nearby slopes that are highly saturated with water; and landslides due to a variety of slope, vegetation, and development conditions. WHAT ARE THE CITIES CONCERNS/ISSUES ASSOCIATED WITH LANDSLIDES? WHAT ARE PAST IMPACTS?

#### **Future Development**

The likelihood of a development occurring in a landslide area is reduced because the City would require mitigation engineering in the design. The costs to mitigate landslide potential would reduce the viability of a proposed project. ANYTHING TO ADD?

#### **Pandemic**

# **Likelihood of Future Occurrence**—Likely **Vulnerability**—Medium

#### Hazard Profile and Problem Description

According to the World Health Organization (WHO), a disease epidemic occurs when there are more cases of that disease than normal. A pandemic is a worldwide epidemic of a disease. A pandemic may occur when a new virus appears against which the human population has no immunity. It is important to realize that this LHMP Update does not examine pandemic contingency plans, but instead focuses on examining the risk of a normal hazard occurrence.

A pandemic occurs when a new virus emerges for which people have little or no immunity, and for which there is no vaccine. This disease spreads easily person-to-person, causes serious illness, and can sweep across the country and around the world in a very short time. The U.S. Centers for Disease Control and Prevention has been working closely with other countries and the World Health Organization to strengthen systems to detect outbreaks of that might cause a pandemic and to assist with pandemic planning and preparation. An especially severe a pandemic could lead to high levels of illness, death, social disruption, and economic loss.

#### Location and Extent

During a pandemic, the whole of the City, County, and surrounding region is at risk, as pandemic is a regional, national, or international event. The speed of onset of pandemic is usually short, while the duration is variable, but can last for more than a year as shown in the 1918/1919 Spanish Flu. There is no scientific scale to measure the magnitude of pandemic. Pandemics are usually measured in numbers affected by the pandemic, and by number who die from complications from the pandemic.

#### **Past Occurrences**

There has been one state and federal disaster declaration due to pandemic, as shown in Table B-18.

Table B-18 Placer County – State and Federal Pandemic Disaster Declarations 1950-2020

Disaster Type		Federal Declarations	State Declarations		
	Count Years		Count	Years	
Pandemic	1	2020	1	2020	

Source: Cal OES, FEMA

The 20th century saw three outbreaks of pandemic flu.

- The 1918-1919 Influenza Pandemic (H1N1)
- ➤ The February 1957-1958 Influenza Pandemic (H2N2)
- ➤ The 1968 Influenza Pandemic (H3N2)

To date, the 21st century has seen two acknowledged pandemics.

- > 2009 Swine Flu (H1N1)
- > 2019/2020 COVID 19

#### SPECIFICS ON HOW CITY WAS AFFECTED

# Vulnerability to and Impacts from Pandemic

Pandemic has and will continue to have impacts on human health in the region. A pandemic occurs when a new virus emerges for which there is little or no immunity in the human population; the virus causes serious illness and spreads easily from person-to-person worldwide. There are several strategies that public health officials can use to combat pandemic. Constant surveillance regarding current pandemic, use of infection control techniques, and administration of vaccines once they become available. Citizens can help prevent spread of a pandemic by staying home, or "self-quarantining," if they suspect they are infected. Pandemic does not affect the buildings, critical facilities, and infrastructure in the City. Pandemic can have varying levels of impact to the citizens of the City and greater County, depending on the nature of the pandemic. PROVIDE ANY UNIQUE VULNERABILITIES/IMPACTS TO THE CITY

Impacts could range from school and business closings to the interruption of basic services such as public transportation, health care, and the delivery of food and essential medicines. Hospitalizations and deaths can occur, especially to the elderly or those with pre-existing underlying conditions. As seen with Covid-19, multiple businesses were forced to close temporarily (some permanently) an unemployment rose significantly. Supply chains for food can be interrupted.

#### **Future Development**

Future development is not expected to be significantly impacted by this hazard, though population growth in the City could increase exposure to a pandemic, and increase the ability of each disease to be transmitted among the population of the City. If the median age of City residents continues to increase, vulnerability to pandemic diseases may increase, due to the fact that these diseases are often more deadly to senior citizens.

#### Severe Weather: Extreme Heat

**Likelihood of Future Occurrence**—Likely **Vulnerability**—Medium

#### Hazard Profile and Problem Description

According to FEMA, extreme heat is defined as temperatures that hover 10 degrees or more above the average high temperature for the region and lasts for several weeks. Heat kills by taxing the human body beyond its abilities. In extreme heat and high humidity, evaporation is slowed, and the body must work extra hard to maintain a normal temperature." Most heat disorders occur because the victim has been overexposed to heat or has over-exercised for his or her age and physical condition. Older adults, young children, and those who are sick or overweight are more likely to succumb to extreme heat.

In addition to the risks faced by residents of the City, there are risk to the built environment from extreme heat. While extreme heat on its own does not usually affect structures, extreme heat during times of drought can cause wildfire risk to heighten. Extreme heat and high winds can cause Public Safety Power Shutdown (PSPS) events, creating significant issues in the City. CAN THE CITY PROVIDE INPUT ON THEIR PSPS EVENTS AND ASSOCIATED ISSUES/CONCERNS? IS THE CITY SEEING ANY REDUCTION IN THE USE OF PSPSs AFFECTING THE CITY?

#### Location and Extent

Heat is a regional phenomenon and affects the whole of the City. Heat emergencies are often slower to develop, taking several days of continuous, oppressive heat before a significant or quantifiable impact is seen. Heat waves do not strike victims immediately, but rather their cumulative effects slowly affect vulnerable populations and communities. Heat waves do not generally cause damage or elicit the immediate response of floods, fires, earthquakes, or other more "typical" disaster scenarios.

The NWS has in place a system to initiate alert procedures (advisories or warnings) when extreme heat is expected to have a significant impact on public safety. The expected severity of the heat determines whether advisories or warnings are issued. The NWS HeatRisk forecast provides a quick view of heat risk potential over the upcoming seven days. The heat risk is portrayed in a numeric (0-4) and color (green/yellow/orange/red/magenta) scale which is similar in approach to the Air Quality Index (AQI) or the UV Index. This can be seen in Section 4.2.2 of the Base Plan.

## **Past Occurrences**

The City Planning Team noted that since extreme heat is a regional phenomenon, events that affected the County also affected the City. Those past occurrences were shown in the Base Plan in Section 4.2.2.

# OTHER SPECIFIC EVENTS? IF NO PAST OCCURRENCES, SIMPLY STATE THAT.

# Vulnerability to and Impacts from Extreme Heat

The City experiences temperatures in excess of 100°F during the summer and early fall months. The temperature moves to 105-115°F in rather extreme situations. During these times, drought conditions may worsen and the City may see an increase in dry fuels. Also, PSPS events may occur during these times as well. Health issues are the primary concern with this hazard, although economic impacts can also be an issue, especially if power is shut off for an extended time. WHAT ARE THE CITIES BIGGEST CONCERNS/ISSUES AND SPECIFIC VULNERABILTIES RELATED TO EXTREEM HEAT?

The elderly and individuals below the poverty level are the most vulnerable to extreme temperatures. Nursing homes and elder care facilities are especially vulnerable to extreme heat events if power outages occur and air conditioning is not available. In addition, individuals below the poverty level may be at increased risk to extreme heat if use of air conditioning is not affordable. This is especially true of homeless people and the transient population.

Days of extreme heat have been known to result in medical emergencies, and unpredictable human behavior. Periods of extended heat and dryness (droughts) can have major economic, agricultural, and

water resources impacts. Extreme heat can also dry out vegetations, making it more vulnerable to wildfire ignitions and spread. ANYTHING TO ADD?

## **Future Development**

Future development of new buildings in the City will likely not be affected by extreme heat. Extreme heat is more likely to affect vulnerable populations. Vulnerability to extreme heat will increase as the average age of the population in each City shifts. It is encouraged that nursing homes and elder care facilities have emergency plans or backup power to address power failure during times of extreme heat and in the event of a PSPS. Low income residents and homeless populations are also vulnerable. Cooling centers for these populations should be utilized when necessary. VERIFY AND ADD TO

# Tree Mortality

**Likelihood of Future Occurrence**—Likely **Vulnerability**—High

# Hazard Profile and Problem Description

One of the many vulnerabilities of drought in Placer County is the increased risk of widespread tree mortality events that pose hazards to people, homes, and community infrastructure, create a regional economic burden to mitigate, and contribute to future fuel loads in forests surrounding communities. During extended drought, tree mortality is driven by a build-up in endemic bark beetle populations and exacerbated by latent populations of a suite of native insects and disease. Non-native forest pests (insects and/or pathogens) can also contribute to tree mortality events.

## Location and Extent

Onset of tree mortality events can be relatively fast; however conditions – such as high stand densities – that lead to tree mortality accumulate slowly over time. Duration of tree mortality is lengthy, as once the tree dies, it remains in place until removed by human activity, wildfire, or breakdown of the wood by nature. Many areas in Placer County have seen increases in tree mortality. CAL FIRE has mapped these areas, which are shown for the City of Colfax on Figure B-8. Using a color legend, the map provided by CAL FIRE shows a scale of:

- Deep burgundy depicting areas with more than 40 dead trees per acre
- Red depicting 15 40 dead trees per acre
- > Orange depicting 5 -15 dead trees per acre
- > Yellow depicting 5 or less dead trees per acre

Tree Mortality Viewer

South State S

Figure B-8 City of Colfax - Tree Mortality Areas

Source: CAL FIRE

In the past decade, mortality has increased in the eastern portion of Placer County. During the 2012-2018 drought, the state of California Tree Mortality Task force designated multiple Tier 1 and Tier 2 High Hazard Zones where tree morality posed an elevated risk to human health, properties, and resource values. Placer County is designated as Tier 2 High mortality hazard on the watershed scale along with numerous Tier 1 High hazard "hot spots". A map of these areas was shown in Section 4.3.18 of the Base Plan.

#### **Past Occurrences**

There have been no state or federal disasters in the County related directly to tree mortality, though it has most likely contributed to the intensity of past wildfires in the County. Those events are shown in the Past Occurrences section of Wildfire below. In 2015, then-Governor Edmund G. Brown Jr. proclaimed a state of emergency due to the extreme hazard of the dead and dying trees. Following the proclamation, 10 counties were determined to be most affected, which included Placer County. Placer County proclaimed a local emergency due to tree mortality conditions on Dec. 8, 2015.

CAN THE CITY PROVIDE INFORMATION AS TO WHETHER OR HOW THIS HAZARD HAS AFFECTED THE CITY? INCLUDE DATES, DAMAGES, IMPACTS?

# Vulnerability to and Impacts from Tree Mortality

Dead trees are a hazard to the general public and forest visitors, but the risk of injury, death, property damage or infrastructure damages varies depending how the hazard interacts with potential targets. Dead trees within the wildland urban intermix or wildland urban interface or urban areas therefore pose a greater risk to due to their proximity to residents, businesses, and road, power, and communication infrastructure.

Dead trees may fall or deteriorate in their entirety or in part – either mechanism has the potential for injury, death, or inflicting severe damage to targets. As the time since tree mortality increases, so does the deterioration of wood and the potential for tree failure. Also at issue is the costs associated with tree removal. Tree Mortality has significantly added to the green waste issue in affected areas.

Placer County is unique in that many residential and business areas of the community are in the wildland urban interface/intermix with the forest. Trees in these interface/intermix areas are particularly vulnerable to insect and/or drought driven mortality because of the additional stressors that urban environments impose on trees (i.e. Soil compaction, altered hydrology, physical damage, heat islands etc.). This exacerbates the occurrence of tree mortality within the populated settings of the County.

## HOW IS THE CITY IMPACTED BY TREE MORTALITY ISSUES?

# **Future Development**

HOW WILL FUTURE DEVELOPMENT OF CITY FACILITIES BE AFFECTED BY THIS HAZARD? HOW WILL THE CITY TAKE IT INTO ACCOUNT WHEN BUILDING AND SITING NEW FACILITIES?

#### Wildfire

**Likelihood of Future Occurrence**—Likely **Vulnerability**—High

# Hazard Profile and Problem Description

Wildland fire and the risk of a conflagration is an ongoing concern for the City of Colfax. Throughout California, communities are increasingly concerned about wildfire safety as increased development in the foothills and mountain areas and subsequent fire control practices have affected the natural cycle of the ecosystem. Wildland fires affect grass, forest, and brushlands, as well as any structures located within them. Where there is human access to wildland areas the risk of fire increases due to a greater chance for human carelessness and historical fire management practices. Historically, the fire season extends from early spring through late fall of each year during the hotter, dryer months; however, in recent years, the risk of wildfire has become a year around concern. Fire conditions arise from a combination of high temperatures, low moisture content in the air and fuel, accumulation of vegetation, and high winds. These high winds can result in red flag days, and can result in PSPS events in the City. While wildfire risk has predominantly been associated with more remote forested areas and wildland urban interface (WUI) areas, significant wildfires can also occur in more populated, urban areas.

#### Location and Extent

Wildfire can affect all areas of the City. CAL FIRE has estimated that the risk varies across the City and has created maps showing risk variance. Following the methodology described in Section 4.3.19 of the Base Plan, wildfire maps for the City of Colfax were created. Figure B-9 shows the CAL FIRE FHSZ in the City. As shown on the maps, the entirety of the City falls in the Very High FHSZ.

FIRE HAZARD SEVERITY ZONES PLACER COUNTY INSET Very High BUTTE High YUBA Moderate Placer County Non-Wildland/Non-Urban Urban Unzoned EL DORADO PLACER COUNTY Grass Valley St LEGEND Local / Main Roads Highways Railroads Rivers COLFAX Lakes Cities COLFAX Counties COLFAX PLACER COUNTY 0.55 1.1 Miles FOSTER MORRISON Placer Data Source: Cal-Fire (Draft 09/2007 - c31fhszl06\_1, Adopted 11/2007 - fhszs06\_3\_31, Recommended 12/2008 - c31fhszl06\_3), Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Figure B-9 City of Colfax – Fire Hazard Severity Zones

Wildfires tend to be measured in structure damages, injuries, and loss of life as well as on acres burned. Fires can have a quick speed of onset, especially during periods of drought or during hot dry summer months. Fires can burn for a short period of time, or may have durations lasting for a week or more. Geographical FHSZ extent from CAL FIRE is shown in Table B-19.

Table B-19 City of Colfax – Geographical FHSZ Extents

Fire Hazard Severity Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Very High	794	100.0%	347	100.0%	447	100.0%
High	0	0.00%	0	0.00%	0	0.00%
Moderate	0	0.00%	0	0.00%	0	0.00%
Non- Wildland/non- Urban	0	0.00%	0	0.00%	0	0.00%
Urban Unzoned	0	0.00%	0	0.00%	0	0.00%
Total	794	100.0%	347	100.0%	447	100.0%

Source: CAL FIRE

#### Past Occurrences

There has been six state and five federal disaster declaration due to wildfire, as shown in Table B-20.

Table B-20 Placer County – State and Federal Wildfire Disaster Declarations 1950-2020

Disaster Type		Federal Declarations	State Declarations		
	Count	Years	Count	Years	
Fire	5	1961, 1965, 1973, 1987, 2010	6	2002, 2004, 2008, 2009, 2014 (twice)	

Source: Cal OES, FEMA

The 2004 Stevens Fire threatened the City. HOW WAS THE CITY IMPACTED BY THIS FIRE?

PROVIDE INFORMATION ON PAST FIRE EVENTS AFFECTING THE CITY. PROVIDE INPUT ON IGNITIONS, LARGE FIRES, DAMAGES, ETC

# Vulnerability to and Impacts from Wildfire

The wildfire hazard is one of the highest priority hazards in the County and City, and is the hazard with the greatest potential for catastrophic loss. High fuel loads in the County and Cities, along with geographical and topographical features, create the potential for both natural and human-caused fires that can result in loss of life and property. These factors, combined with natural weather conditions common to the area, including periods of drought, high temperatures, low relative humidity, and periodic winds, can result in frequent and sometimes catastrophic fires. The more urbanized areas within the County are not immune from fire. The dry vegetation and hot and sometimes windy weather, combined with continued growth in

the WUI areas, results in an increase in the number of ignitions. Any fire, once ignited, has the potential to quickly become a large, out-of-control fire. As development continues throughout the County and City, especially in these interface areas, the risk and vulnerability to wildfires will likely increase.

Wildfire is a constant threat to the City of Colfax. The Safety Element of Colfax's General Plan notes that Colfax and the surrounding area is designated as a "very high hazard area", and wildland and wildland urban interface fires do occur relatively frequently. The Safety Element describes the following three factors that contribute to the wildfire hazard within the city and surrounding areas:

- A climatic pattern with long dry summers, clear skies with maximum solar radiation, high daytime summer temperatures, and extremely low relative humidity.
- Vegetation communities which often have adapted to this seasonal drought by becoming fire tolerant (e.g., chaparral), and have high fuel loading.
- Human settlement patterns which often are interspersed with areas of heavy vegetation/fuel accumulations along canyons, slopes, and foothill areas.

# WHAT ARE KEY CONCERNS AND ISSUES IN COLFAX. INCLUDE ISSUES LIKE ACCESS TO AREAS, TYPES OF EXISTING STRUCTURES MORE PRONE TO FIRES, ETC.

Potential impacts from wildfire include loss of life and injuries; damage to structures and other improvements, natural and cultural resources, croplands, and timber; and loss of recreational opportunities. Wildfires can cause short-term and long-term disruption to the City. Fires can have devastating effects on watersheds through loss of vegetation and soil erosion, which may impact the City by changing runoff patterns, increasing sedimentation, reducing natural and reservoir water storage capacity, and degrading water quality. Fires can also affect air quality in the City; smoke and air pollution from wildfires can be a severe health hazard.

Although the physical damages and casualties arising from wildland-urban interface fires may be severe, it is important to recognize that they also cause significant economic impacts by resulting in a loss of function of buildings and infrastructure. Economic impacts of loss of transportation and utility services may include traffic delays/detours from road and bridge closures and loss of electric power, potable water, and wastewater services. Schools and businesses can be forced to close for extended periods of time. Recently, the threat of wildfire, combined with the potential for high winds, heat, and low humidity, has caused PG&E to initiate a PSPS which can also significantly impact a community through loss of services, business closures, and other impacts associated with loss of power for an extended period. In addition, catastrophic wildfire can create favorable conditions for other hazards such as flooding, landslides, and erosion during the rainy season.

#### Assets at Risk

Based on the vulnerability of Colfax to the wildfire hazard, the sections that follow describes significant assets at risk in the City of Colfax. This section includes the values at risk, population at risk, and critical facilities at risk.

#### Values at Risk

GIS was used to determine the possible impacts of wildfire within the City of Colfax. The methodology described in Section 4.3.19 of the Base Plan was followed in determining structures and values at risk in fire hazard severity zones. Summary analysis results for Colfax are shown in Table B-21, which summarizes total parcel counts, improved parcel counts and their structure values by fire hazard severity zone.

Table B-21 City of Colfax – Count and Value of Parcels by Fire Hazard Severity Zone

Fire Hazard Severity Zone	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Very High	988	711	\$64,997,967	\$152,168,583	\$104,699,837	\$321,866,387
Colfax Total	988	711	\$64,997,967	\$152,168,583	\$104,699,837	\$321,866,387

Source: Placer County 2020 Parcel/Assessor's Data, CAL FIRE

Table B-22 breaks out the Table B-21 by adding the property use details by fire hazard severity zone for the City. As shown in both of these tables, all of the City falls within the very high FHSZ.

Table B-22 City of Colfax – Count and Value of Parcels by Fire Hazard Severity Zone and Property Use

Fire Hazard Severity Zone / Property Use	Total Parcel Count	Improved Parcel Count	Value Structure C		Estimated Contents Value	Total Value
Very High						
Agricultural	0	0	\$0	\$0	\$0	\$0
Commercial	118	70	\$12,126,301	\$21,608,886	\$21,608,886	\$55,344,073
Industrial	33	20	\$9,487,797	\$15,276,833	\$22,915,248	\$47,679,878
Institutional	13	9	\$1,039,080	\$5,047,655	\$5,047,655	\$11,134,390
Miscellaneous	166	3	\$2,860,671	\$20,892	\$20,892	\$2,902,455
Natural / Open Space	16	0	\$0	\$0	\$0	\$0
Residential	642	609	\$39,484,118	\$110,214,317	\$55,107,156	\$204,805,591
Very High Total	988	711	\$64,997,967	\$152,168,583	\$104,699,837	\$321,866,387
Colfax Total	988	711	\$64,997,967	\$152,168,583	\$104,699,837	\$321,866,387

Source: Placer County 2020 Parcel/Assessor's Data, CAL FIRE

## Population at Risk

The FHSZ dataset was overlayed on the parcel layer. Those residential parcel centroids that intersect the FHSZs were counted and multiplied by the 2010 Census Bureau average household factors for the City of Colfax - 2.45. According to this analysis, there is a total population of 1,401 residents of Colfax at risk to moderate or higher FHSZs. This is shown in Table B-23. It should be noted that this calculation is based

on US Census Bureau averages for the City, in effect all 2,152 residents of the City would fall in the Very High FHSZ.

Table B-23 City of Colfax – Count of Improved Residential Parcels and Population by Fire Hazard Severity Zone

	Very High		High		Moderate	
Jurisdiction	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk
Colfax	609	1,401	0	0	0	0

Source: Placer County 2020 Parcel/Assessor's Data, CAL FIRE

# Critical Facilities at Risk

An analysis was performed on the critical facility inventory in Colfax in identified FHSZs. Critical facilities in a FHSZ in the City of Colfax are shown in Figure B-10 and detailed in Table B-24. Details of critical facility definition, type, name and address and jurisdiction by fire hazard severity zone are listed in Appendix F.

FIRE HAZARD SEVERITY ZONES Very High NEVADA High YUBA Moderate Placer County Non-Wildland/Non-Urban Urban Unzoned EL DORADO 174 PLACER COUNTY Grass Valley St LEGEND Local / Main Roads Highways Railroads Rivers COLFAX Lakes Cities COLFAX Counties **COLFAX PLACER** COUNTY CRITICAL FACILITY
CATEGORY Class 1 Class 2 Class 3 Placer 0.55 1.1 Miles FOSTER MORRISON Data Source: Cal-Fire (Draft 09/2007 - c31fhszl06\_1, Adopted 11/2007 - fhszs06\_3\_31, Recommended 12/2008 - c31fhszl06\_3), Placer County GIS, Cal-Atlas, NVBLM; Map Date: 2021.

Figure B-10 City of Colfax – Critical Facilities in Fire Hazard Severity Zones

Table B-24 City of Colfax - Critical Facilities by Fire Hazard Severity Zone

Fire Hazard Severity Zone	Critical Facility Class	Critical Facility Type	Facility Count	
	Class 2	Fire Station	2	
VII:-1-	Class 2	Police Station	1	
Very High	<i>C</i> 1 2	Hall	1	
	Class 3	Water Treatment Plant	1	
Very High Total			5	
Colfax Total	Colfax Total			

Source: CAL FIRE, Placer County

## **Future Development**

Since the whole of the City is located in a very high fire severity zone, all future development in the City is at risk to wildfire. City building codes are in effect and should continue to be updated as appropriate to reduce this risk. VERIFY AND ADD TO

GIS Analysis

# **PLACE**

# **B.6** Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capability assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation education, outreach, and partnerships, and other mitigation efforts.

# **B.6.1.** Regulatory Mitigation Capabilities

Table B-25 lists regulatory mitigation capabilities, including planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are in place in the City of Colfax. FILL OUT TABLE – INFORMATION CURRENTLY POPULATED IN THE TABLE IS FROM THE 2016 LHMP. MAKE SURE TO FILL OUT THE LAST CELL

Table B-25 City of Colfax Regulatory Mitigation Capabilities

Plans	Y/N Year	Does the plan/program address hazards?  Does the plan identify projects to include in the mitigation strategy?  Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan/General Plan	Y/ 2020	Housing Element was updated in 2014. The General plan addresses hazards in the safety element. Mitigation actions are included in many elements. The General Plan is used to implement mitigation actions.
Capital Improvements Plan	Y	

Economic Development Plan	Y	
Local Emergency Operations Plan	Y	
Continuity of Operations Plan		
Transportation Plan		
Stormwater Management Plan/Program	Y	Terrence Lowell and Associates
Engineering Studies for Streams	N	
Community Wildfire Protection Plan	Y	Y, it is a WUI (Wildland Urban Interface) plan, Y
Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)		
Building Code, Permitting, and Inspections	Y/N	Are codes adequately enforced?
Building Code	Y	Version/Year: 2013 CBC
Building Code Effectiveness Grading Schedule (BCEGS) Score		Score:
Fire department ISO rating:	Y	Rating: 5
Site plan review requirements	Y	Design Guidelines in Zoning Ord
Land Use Planning and Ordinances	Y/N	Is the ordinance an effective measure for reducing hazard impacts?  Is the ordinance adequately administered and enforced?
Zoning ordinance	Y	Updated in 2012. It is effective and adequately enforced.
Subdivision ordinance	Y	
Floodplain ordinance	N	No 100- or 500-year floodplain in the City.
Natural hazard specific ordinance (stormwater, steep slope, wildfire)		
Flood insurance rate maps	N/A	
Elevation Certificates		
Acquisition of land for open space and public recreation uses		
Erosion or sediment control program	Y	Terrence Lowell and Associates
Other		
How can these capabilities be expanded	d and im	proved to reduce risk?
PROVIDE SPECIFIC DETAILS OF ARI AND HOW/WHY IT WILL HELP THE		IMPROVEMENT OF THESE TYPES OF CAPABILITIES

Source: City of Colfax

# The City of Colfax General Plan Program, 2020

The City of Colfax General Plan Program serves as the blueprint for future growth and development and provides comprehensive planning for the future. It encompasses what the City is now, and what it intends to be, and provides the overall framework of how to achieve this future condition (see the discussion in Section 4.3.1 Growth and Development Trends).

The current General Plan is considered outdated. It is anticipated that this process will be completed by 2016. The most substantive changes in this document will be the Land Use, Circulation and Natural Resources Elements. Minor changes will be made to bring the document into internal consistency to the Safety, Community Design, and Economic Development Elements. No changes are anticipated to the Noise Element.

The current Safety Element, for the most part, provides accurate and current information and focuses on safety issues to be considered in planning for the present and future development of the Colfax Planning Area. Identified hazards include fire, geologic/seismic, erosion, flooding, and hazardous materials. Mitigation-related goals, policies, and actions are presented below.

Goal 7.9.1:	To protect the community of Colfax from injury, loss of life, and property damage resulting from natural catastrophes and any hazardous conditions.
Policy 7.9.1.1:	Require a review of all potential hazards in areas to be developed.
7.9.1.A	Actions: Make information relating to potential hazards on site specific areas in the City available to all City agencies and related City leadership and planners.

Goal 7.9.2:	To effectively minimize risks associated with seismic hazards by regulating the design and siting of new development in the City of Colfax.
Policy 7.9.2.1	Avoid placement of critical structures, public facilities, and high-occupancy structures in areas prone to ground failure during an earthquake.
Policy 7.9.2.2	Establish acceptable seismic safety standards so that all new buildings shall be constructed to resist the stresses and ground shaking produced during earthquakes.
Policy 7.9.2.3	Require a review of all potential geological hazards, including seismic hazards, for all developments in identified hazardous areas.
7.9.2.A	Action: Record information on potential geologic and seismic hazards with parcel or subdivision maps.
7.9.2.B	Action: Review Building Code requirements to determine the adequacy of standards necessary to protect against all seismic hazards and to assure that the Code is current with the latest technological advances.
7.9.2.C	Action: Develop programs in cooperation with other public agencies to increase public awareness of seismic hazards and to assure that the Code is current with the latest technological advances.

# Geological Hazards

Goal 7.9.3	New development proposed within areas of potential geological hazards shall not be endangered by, nor contribute to, the hazardous conditions on the site or an adjoining properties.
Policy 7.9.3.1:	Adequate mitigation shall be required on sites with landslide potential, or erodible soils to protect against injury and property damage and to assure a level of development which will not accelerate runoff or degrade water quality.
Policy 7.9.3.2	Replanting of vegetation following development shall be required on all slopes prone to erosion and/or instability. Drought resistant plant types shall be used for landscaping on post development slopes where excess water might induce land slippage or soil erosion.

Policy 7.9.3.3	Encourage clustering of development away from areas considered geologically unstable.
7.9.3.A	Actions: Adopt and enforce a comprehensive Grading and Erosion Control Ordinance, requiring control of existing erosion problems, as well as the installation of erosion, sediment, and runoff control measures in new developments.
7.9.3.B	Actions: Adopt regulations relative to zoning and subdivision ordinances which regulate land alterations, road construction or structural development on slopes of 15 percent or greater.

# Wastewater Treatment

Goal 7.9.4	To insure the adequate wastewater collection, treatment and safe disposal.
Policy 7.9.41	The City shall limit development if the limits of the Wastewater Treatment Plan (WWTP) are reached.
Policy 7.9.4.2	The City shall promote efficient water use and reduced wastewater system demand by:
A.	Require water-conserving design and equipment in new construction;
В.	Encouraging retrofitting with water-conserving devices;
C.	Design wastewater systems to minimize inflow and infiltration to the extent economically feasible.
Policy 7.9.4.3	The City shall encourage pre-treatment of commercial and industrial wastes prior to their entering community collection and treatment systems.
7.9.4.4	The city shall permit on-site sewage treatment and disposal on parcels where all current regulations can be met and where parcels have the area, soils, and other characteristics that permit such disposal facilities without threatening surface or groundwater quality or posing any other health hazards.
7.9.4.A	Actions: The City shall proceed with the design, financing and construction of capital improvements of the current wastewater treatment system to meet future growth and development demands.
7.9.4.B	Actions: City staff shall monitor and report quarterly to the City Council on the current inflow levels of the WWTP.
7.9.4.C	Actions: The city shall continue to evaluate and collect development fees to cover the maintenance and improvements required in the wastewater system.

# Fire Hazard Safety

Goal 7.9.5	To protect the public from wildland and urban fire hazards and reduce the risks of wildfires and structural conflagrations by mitigating or minimizing use and development in high fire hazard areas, and by maximizing fire prevention measures and citizen awareness of fire hazards.
Policy 7.9.5.1	All new development shall be constructed, at a minimum, to the fire safety standards contained in the California Fire and Building Codes.
Policy 7.9.5.2	Require all new developments, including single family dwellings on existing parcels of record, to provide adequate access for fire protection.
Policy 7.9.5.3	Amend City Ordinances to include specific road standards developed in conjunction with Colfax Fire Department.
7.9.5.A	Action: Enforce the existing City Ordinance regarding weed abatement on lots and larger properties within city-limits.

7.9.5.B	Action: Adopt an ordinance for the provision of fire-resistant materials and landscaping, and the use of early warning systems such as sprinklers with alarms for all new developments.
7.9.5.C	Action: To the maximum extent feasible conduct-periodic inspections of vacant properties to ensure that dry weeds and other combustible fuels are not permitted to accumulate.

# City of Colfax Emergency Operations Plan

The City of Colfax Emergency Operations Plan (EOP) Plan addresses the planned response for the City to emergencies associated with disasters, technological incidents, or other dangerous conditions created by either man or nature. It provides an overview of operational concepts, identifies components of the City emergency management organization, and describes the overall responsibilities of local, state, and federal entities.

# **OTHERS?**

# B.6.2. Administrative/Technical Mitigation Capabilities

Table B-26 identifies the City department(s) responsible for activities related to mitigation and loss prevention in Colfax. FILL OUT TABLE – INFORMATION CURRENTLY POPULATED IN THE TABLE IS FROM THE 2016 LHMP. MAKE SURE TO FILL OUT THE LAST CELL

Table B-26 City of Colfax's Administrative and Technical Mitigation Capabilities

Administration	Y/N	Describe capability Is coordination effective?
Planning Commission	Y	City Council sits as PC when needed
Mitigation Planning Committee	N	
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	Y	Storm draining clearing, tree trimming for defensible space (fire danger)
Mutual aid agreements	Y	Cal Fire and other fire agencies
Other		
Staff	Y/N FT/PT	Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective?
Chief Building Official	Y, P/T	Y, Y, Y
Floodplain Administrator	N	
Emergency Manager	Y	Community Services Director
Community Planner	Y P/T	
Civil Engineer	Y	
GIS Coordinator	Y	
Other		
Technical		

Warning systems/services (Reverse 911, outdoor warning signals)	Y	City is part of the Everbridge program through Placer Sheriff Dept. and Placer Alert (cell phone register to receive alerts)	
Hazard data and information			
Grant writing	Y		
Hazus analysis			
Other			
How can these capabilities be expanded and improved to reduce risk?			
PROVIDE SPECIFIC DETAILS OF AREAS FOR IMPROVEMENT OF THESE TYPES OF CAPABILITIES AND HOW/WHY IT WILL HELP THE CITY			

Source: City of Colfax

# **B.6.3.** Fiscal Mitigation Capabilities

Table B-27 identifies financial tools or resources that the City could potentially use to help fund mitigation activities. FILL OUT TABLE – INFORMATION CURRENTLY POPULATED IN THE TABLE IS FROM THE 2016 LHMP. MAKE SURE TO FILL OUT THE LAST CELL

Table B-27 City of Colfax's Fiscal Mitigation Capabilities

Funding Resource	Access/ Eligibility (Y/N)	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?	
Capital improvements project funding	Y		
Authority to levy taxes for specific purposes	Y		
Fees for water, sewer, gas, or electric services	Y		
Impact fees for new development	Y		
Storm water utility fee	Y		
Incur debt through general obligation bonds and/or special tax bonds	Y		
Incur debt through private activities	Y		
Community Development Block Grant	Y		
Other federal funding programs			
State funding programs	Y		
Other			
How can these capabilities be expanded and improved to reduce risk?			
PROVIDE SPECIFIC DETAILS OF AREAS FOR IMPROVEMENT OF THESE TYPES OF CAPABILITIES AND HOW/WHY IT WILL HELP THE CITY			

Source: City of Colfax

# B.6.4. Mitigation Education, Outreach, and Partnerships

Table B-28 identifies education and outreach programs and methods already in place that could be/or are used to implement mitigation activities and communicate hazard-related information. FILL OUT TABLE

# – INFORMATION CURRENTLY POPULATED IN THE TABLE IS FROM THE 2016 LHMP. MAKE SURE TO FILL OUT THE LAST CELL

Table B-28 City of Colfax's Mitigation Education, Outreach, and Partnerships

Program/Organization	Yes/No	Describe program/organization and how relates to disaster resilience and mitigation.  Could the program/organization help implement future mitigation activities?	
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Y	ALTA CERT (through Alta Fire dept), Red Cross	
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	N		
Natural disaster or safety related school programs	Y	CSOs thru Placer County Sheriff	
StormReady certification			
Firewise Communities certification			
Public-private partnership initiatives addressing disaster-related issues	Y	Haz Mat transport training with UPRR and residents	
Other			
How can these capabilities be expanded and improved to reduce risk?			
PROVIDE SPECIFIC DETAILS OF AREAS FOR IMPROVEMENT OF THESE TYPES OF CAPABILITIES AND HOW/WHY IT WILL HELP THE CITY			

Source: City of Colfax

## **UPDATE BELOW**

The City contracts with the Placer County Sherriff's Department to provide police services. The 24 hour per day service includes patrol, detectives, evidence, juvenile services, dispatch center, traffic enforcement and traffic accident investigation. Other specialized units that are available upon need include: S.W.A.T, Dive/Rescue Team, Explosive Ordinance Detail, K-9/Narcotic Detection, Air Operations, Bike Patrol, Mounted Patrol, Reserve Details, D.U.I., and Targeted Enforcement and Search and Rescue Operations.

The City contracts with the California Department of Forestry to provide fire safety services. The 24 hour per day service includes a paid part-time Fire Chief, fire marshal services, dispatch and staffing. The Department maintains active volunteer program with 17 members. The City maintains two volunteer staffed fire stations.

The City also utilizes the new county-wide Wide Area Rapid Notification (WARN) system. WARN is a regional system that can be used by all Placer County law agencies as well as fire departments, the Office of Education and the Office of Emergency Services. WARN utilizes a list of telephone numbers and addresses from the phone company. Officials can pinpoint a geographic area, then type in a message that a computer automated voice will read to residents. The system is used for a variety of purposes including missing persons, fire evacuations, snow days and more.

# **B.6.5.** Other Mitigation Efforts

The City has many other completed or ongoing mitigation projects/efforts that include the following:

- ➤ The City has increased enforcement of its weed abatement ordinance since 2002.
- > The Colfax Lions Club is ensuring that all homes within the city have adequate address signs.
- ➤ The Wastewater Treatment Plant has been upgraded, which will lessen the potential of a contamination event. Ongoing improvements to the Colfax Water Treatment Plant will improve water quality and serve an additional 231 more housing units.
- > ANYTHING NOT CAPTURED ABOVE?

# **B.7** Mitigation Strategy

# B.7.1. Mitigation Goals and Objectives

The City of Colfax adopts the hazard mitigation goals and objectives developed by the HMPC and described in Chapter 5 Mitigation Strategy.

# B.7.2. NFIP Mitigation Strategy

The City of Colfax does not have any FEMA floodplains and thus does not participate in the NFIP nor the CRS.

# **B.7.3.** Mitigation Actions

The planning team for the City of Colfax identified and prioritized the following mitigation actions based on the risk assessment. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. The following hazards were considered a priority for purposes of mitigation action planning:

# Dam Failure

- Drought & Water Shortage
- Earthquake
- ➤ Floods: Localized Stormwater
- Landslides, Mudslides, and Debris Flows
- Pandemic
- > Severe Weather: Extreme Heat
- > Severe Weather: Heavy Rains and Storms?
- > Tree Mortality
- Wildfire

It should be noted that many of the projects submitted by each jurisdiction in Table 5-4 in the Base Plan benefit all jurisdictions whether or not they are the lead agency. Further, many of these mitigation efforts are collaborative efforts among multiple local, state, and federal agencies. In addition, the countywide public outreach action, as well as many of the emergency services actions, apply to all hazards regardless of hazard priority. Collectively, this multi-jurisdictional mitigation strategy includes only those actions and

projects which reflect the actual priorities and capacity of each jurisdiction to implement over the next 5-years covered by this plan. It should further be noted, that although a jurisdiction may not have specific projects identified for each priority hazard for the five year coverage of this planning process, each jurisdiction has focused on identifying those projects which are realistic and reasonable for them to implement and would like to preserve their hazard priorities should future projects be identified where the implementing jurisdiction has the future capacity to implement.

#### Multi-Hazard Actions

Action 1. Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness

**Hazards Addressed**: Multi-hazard (Climate Change, Drought & Water Shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslides, Mudslides, and Debris Flows, Pandemic, Severe Weather: Extreme Heat, Severe Weather: Heavy Rains and Storms, Tree Mortality, Wildfire)

**Goals Addressed**: 1, 2, 3, 4, 5, 6, 7

**Issue/Background**: The City and County play a key role in public outreach/education efforts to communicate the potential risk and vulnerability of their community to the effects of natural hazards. A comprehensive multi-hazard public education program will better inform the community of natural hazards of concern and actions the public can take to be better prepared for the next natural disaster event.

**Project Description**: A comprehensive multi-hazard outreach program will ascertain both broad and targeted educational needs throughout the community. The City will work with the County and other agencies as appropriate to develop timely and consistent annual outreach messages in order to communicate the risk and vulnerability of natural hazards of concern to the community. This includes measures the public can take to be better prepared and to reduce the damages and other impacts from a hazard event. The public outreach effort will leverage and build upon existing mechanisms, will include elements to meet the objectives of Goal 3 of this LHMP Update, and will consider:

- Using a variety of information outlets, including websites, local radio stations, news media, schools, and local, public sponsored events;
- Creating and distributing (where applicable) brochures, leaflets, water bill inserts, websites, and public service announcements;
- Displaying public outreach information in County office buildings, libraries, and other public places and events;
- > Developing public-private partnerships and incentives to support public education activities.

**Location of Project**: Citywide

**Other Alternatives**: Continue public information activities currently in place.

**Existing Planning Mechanism(s) through which Action Will Be Implemented**: Existing County outreach programs will be reviewed for effectiveness and leveraged and expanded upon to reach the broader region.

**Responsible Office**: City of Colfax in partnership with the County

Priority (H, M, L): High

**Cost Estimate**: Annual costs to be determined, and will depend on the scope and frequency of activities and events as well as volunteer participation

**Benefits** (Losses Avoided): Increase residents' knowledge of potential hazards and activities required to mitigate hazards and be better prepared. Protect lives and reduce damages, relatively low cost to implement.

Potential Funding: Local budgets, grant funds

**Timeline:** Ongoing/Annual public awareness campaign

# Action 2. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan

**Hazards Addressed**: Multi-hazard (Climate Change, Drought & Water Shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslides, Mudslides, and Debris Flows, Pandemic, Severe Weather: Extreme Heat, Severe Weather: Heavy Rains and Storms, Tree Mortality, Wildfire)

**Goals Addressed**: 1, 2, 3, 4, 5, 6, 7

**Issue/Background:** Local jurisdictional reimbursement for mitigation projects and cost recovery after a disaster is guided by Government Code Section 8685.9 (AB 2140). Specifically, this section requires that each jurisdiction adopt a local hazard mitigation plan (LHMP) in accordance with the federal Disaster Mitigation Act of 2000 as part of the Safety Element of its General Plan. Adoption of the LHMP into the Safety Element of the General Plan may be by reference or incorporation.

Other Alternatives: No action

**Existing Planning Mechanisms through which Action will be Implemented**: Safety Element of General Plan

Responsible Office: City of Colfax Planning Department

Priority (H, M, L): High

Cost Estimate: Jurisdictional board/staff time

**Potential Funding**: Local budgets

**Benefits** (avoided Losses): Incorporation of an adopted LHMP into the Safety Element of the General Plan will help jurisdictions maximize the cost recovery potential following a disaster.

**Schedule**: As soon as possible

Hazards Addressed: Wildland fire hazards within the City Limits

**Goals Addressed**: 1, 2, 3, 4, 5, 6, 7

**Issue/Background**: The City of Colfax is classified as a "Very High Fire Hazard Severity Zone" Local Responsibility Area (LRA) by CDF in compliance with the Bates Bill (California Government Code sections 51175-51188). The city is surrounded by State Responsibility Area (SRA) rated as high fire hazard. Wildfire is a constant threat to the city. There are several vacant parcels, and some developed properties, which have excessive growth of grass and other potential ladder fuels each year. If left untreated these fuels increase the fire hazard within the city limits. Further, one large parcel near the Interstate 80 exit is used by CDF as a staging area during fire season and this lot needs to be available for use. Note that the City is in the process of revising its grading ordinance to further delineate what is vegetation removal and what is grading. The intent is to facilitate vegetation removal without a lengthy permit process.

**Other Alternatives**: Continue to rely on property owners to take action without prompting, which has not worked historically

# **Existing Planning Mechanism(s) through which Action Will Be Implemented:**

- Seneral Plan, 1998 The Safety Element recognizes that Colfax and the surrounding area are designated as a "very high hazard area" with regard to wildland and urban-wildland fires. Flooding is not recognized as a hazard to the City as no portions are located within the 100-year floodplain. The Safety Element notes that the State's listing of active faults does not include any showing surface rupture in the City of Colfax, but relatively little fault mapping has been completed in the region.
- ➤ The City upgraded its building code to the 1997 Universal Building Code in 2003.
- ➤ In 2004, the City updated its Hillside Development Guidelines to address wildfire issues, particularly vegetation management and restrictions when building on slopes.
- The City has increased enforcement of its weed abatement ordinance in 2002.
- > The Colfax Lions Club is ensuring that all homes within the city have adequate address signs.

Responsible Office/Partners: City Manager; Placer Sierra Fire Safe Council

**Project Priority**: Very High

**Cost Estimate**: Inspect all parcels in the City to determine which ones need treatment—\$4,000. To reduce costs, some of this could be done by the Volunteer Fire Department. Re-inspect—\$2,000. To reduce costs, some of this could be done by the Volunteer Fire Department. For those parcels which do not comply, the City must perform the work at \$500 to \$1,000 per parcel. Technically, this cost is recovered by tax liens on the property but in reality the City has to carry the cost for some time, and the likelihood of recovery is low.

**Benefits** (Losses Avoided): The direct benefit would be to the 2000 residents of Colfax City and their business community. Plus Colfax High School enrolls 1000 students plus faculty and the Colfax Elementary School enrolls 380 students plus faculty. The City is also home to the largest publisher of medical forms in Northern California. Protecting the residents, students, businesses, and workforce in this community from wildfire is the greatest benefit from this project.

Potential Funding: Grants, City General Fund

**Timeline**: Annually in the Spring before fire season is declared, assuming funding is available.

Action 4. Colfax Schools Evacuation Site Shaded Fuel Break

**Hazards Addressed**: The mitigation goals of this project are to put a 200' wide Shade Fuel Break on the ridge line to the west of the Colfax High and Elementary Schools to help protect this area from a wildfire approaching from the surrounding unincorporated areas.

Wildfire is the largest hazard this community faces. If a wildfire rages through this community unchecked the ability for Colfax City and area's within its sphere of influence to rebuild and survive are slim. It's not only an issue of if but when this community and its population will be threatened by wildfire. Wildfire has knocked at the door 3 times in the past 7 years. As the brush continues to grow the likelihood of a wildfire succeeding in opening that door continues to grow. This project will at least start the process to giving this community and its population a fighting chance.

**Goals Addressed**: 1, 2, 3, 4, 5, 6, 7

**Issue/Background**: The City of Colfax encompasses 1.3 square miles. Wildfire is a constant threat. The Safety Element of Colfax's General Plan notes that Colfax and the surrounding area are designated as a "very high fire hazard area", and wildland and urban-wildland interface fires do occur relatively frequent, with a significant interface fire (the "Narrow Gauge Fire") burning close to the edge of town in 2001. The 2001 Ponderosa Fire and the 2004 Stevens Fire also threatened the city.

The Colfax Elementary School and Colfax High School are located in a feasible location for an evacuation site but a Shade Fuel Break needs to be in place in the event of a wildfire coming out of the Bear River drainage to the West of their location.

**Other Alternatives**: No Action

# **Existing Planning Mechanism(s) through which Action Will Be Implemented:**

- General Plan, 1998 The Safety Element recognizes that Colfax and the surrounding area are designated as a "very high hazard area" with regard to wildland and urban-wildland fires.
- > The City upgraded its building code to the 1997 Universal Building Code in 2003.
- In 2004, the City updated its Hillside Development Guidelines to address wildfire issues, particularly vegetation management and restrictions when building on slopes.
- The City has increased enforcement of its weed abatement ordinance in 2002.
- ➤ The Colfax Lions Club is ensuring that all homes within the city have adequate address signs.

**Responsible Office/Partners**: City of Colfax and Placer County

**Project Priority:** Very High

**Cost Estimate**: \$400,000

**Benefits** (Losses Avoided): The following sections show the value of property and key inventories at risk within the City of Colfax. Utilizing Placer County assessor data, the following information was obtained for the City of Colfax.

Property Type	# of units	Value
Residential	701 Units	\$90,073,829
Commercial	119 Units	\$24,574,567
Industrial	26 Units	\$16,714,795
Total	850 Units	\$131,363,191

2004 Certified Roll Values Property Type Units Net Value

## **Potential Funding**: Grants

**Timeline**: Complete assessment and plan, and identify sources of funding, by no later than the next update of this plan, due in 2020

Action 5. Evaluate the Need and Feasibility of Improving Fire Prevention for the Historic Business District

Hazards Addressed: Potential Structural Fires within the business district of Colfax City

**Goals Addressed**: 1, 2, 3, 4, 5, 6, 7

**Issue/Background:** Much of the historic downtown of Colfax was built over a century ago. While most of the individual buildings do not qualify for classification as historic, due to past interior remodeling, etc., the aggregate of the Historic District is essential to the character and even the survival of the City. These buildings do not have interior sprinklers or even smoke alarms or emergency lighting. Some buildings share attic space, which could easily spread a fire from one business to another, as happened in historic Nevada City, CA a couple of years ago. This project will evaluate the historic downtown business buildings to see what fire prevention measures are advisable, what are feasible to accomplish, and identify sources of funding

## Other Alternatives: No Action

# Existing Planning Mechanism(s) through which Action Will Be Implemented:

- ➤ General Plan, 1998 The Safety Element recognizes that Colfax and the surrounding area are designated as a "very high hazard area" with regard to wildland and urban-wildland fires. Flooding is not recognized as a hazard to the City as no portions are located within the 100-year floodplain. The Safety Element notes that the State's listing of active faults does not include any showing surface rupture in the City of Colfax, but relatively little fault mapping has been completed in the region.
- ➤ The City upgraded its building code to the 1997 Universal Building Code in 2003.
- In 2004, the City updated its Hillside Development Guidelines to address wildfire issues, particularly vegetation management and restrictions when building on slopes.
- The City has increased enforcement of its weed abatement ordinance in 2002.
- The Colfax Lions Club is ensuring that all homes within the city have adequate address signs.

#### **Responsible Office/Partners**: City Manager

Project Priority: Very High

Cost Estimate: TBD

**Benefits** (Losses Avoided): While the Assessor Roll book puts a value of \$24.6 million of all 119 businesses in Colfax (which includes businesses outside of the Historic District), the buildings in the Historic Downtown are actually irreplaceable. If any of these buildings is lost to fire, the character of the Historic District would be lessened or even lost. This would negatively impact the ability of the City to survive since the Historic District is one of its major attractions for tourists and visitors and their dollars.

**Potential Funding**: Grants

**Timeline**: Complete assessment and plan, and identify sources of funding, by no later than the next update of this plan, due in 2020.